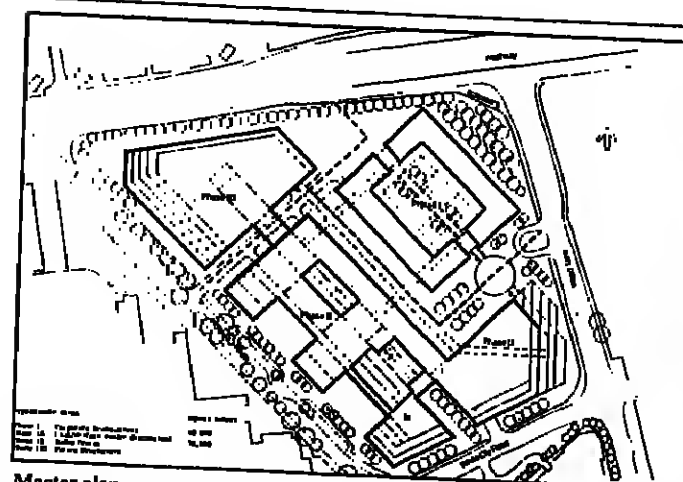


BUILDING DESIGN

The weekly newspaper for the design team

FRIDAY OCTOBER 10 1986



BBC's White City giant

THE BBC has finally unveiled plans for its new White City headquarters, and now faces tough negotiations with the council to get the scheme accepted.

Hammer Smith & Fulham Council has agreed to hold another public meeting after local residents voiced concerns about the proposals.

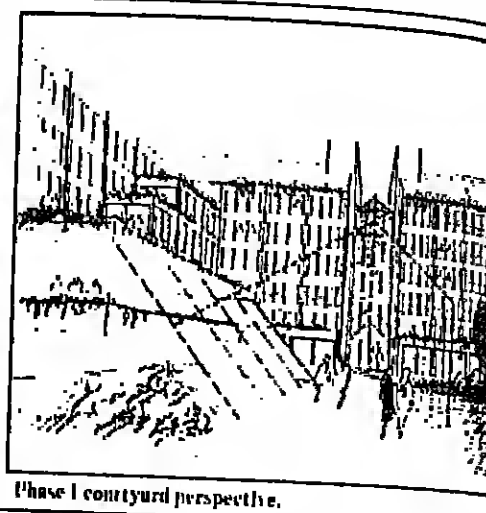
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The building's main entrance will be through a rotunda landing — via glazed walkways — to the corporation's headquarters, the radio centre, and further broadcasting facilities.

The corporate headquarters will be the first phase to be completed, occupying the north-east corner of the 7.5ha site and acting as a buffer between the radio centre — not due to be fully occupied until 1995 — Westway and Wood Lane.

External walkways will run around the building to provide further shade, and make window cleaning easier.

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Phase 1 courtyard perspective.

Tower block gas fears

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But tenant groups fear that the large percentage of low-income families on estates will continue to use LPG (liquid petroleum gas) heaters because they cannot afford to heat their homes with electricity.

Two blocks in the borough are giving tenants particular cause for concern. Northwood Tower and Whitebeam Towers, two blocks built to the BRS Battery Cast system, have been declared safe by consultants Brian Moorehead & Partners.

But tenants claim a radar survey by GB Geotechnics — the surveyors who accurately predicted the faults in Ronan Point — shows these two blocks are the most dangerous of Waltham Forest's towers.

Tenant representative Keith Rayner is calling for a special general meeting of the council's housing committee to consider Moorehead's report and that of GB Geotechnics.

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The Newham Tower Block Tenants campaign is claiming a massive government cover-up into why the faults in Ronan Point were never discovered despite at least two major investigations into the 21-storey block in East London.

Hugh Griffiths QC, who presided over the inquiry into the collapse in 1968, said: "The standards of both workmanship

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WHEN BP RESEARCH

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Will dump Atwell and quit Group of Eight

HACKNEY'S JOB THREAT MANIFESTO

IBA director of public affairs, David Atwell, will be ousted in a staff take-up at Portland Place if Rod Hackney wins the presidential battle with Raymond Andrews.

Hackney, who launched a challenge to Andrews last week, has vowed to very seriously rethink the affairs of the secretariat at Portland Place.

"The first person to go would be the director of public affairs,"

he said. "The first person to go would be the director of public affairs,"

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Hackney is keen to get on influential and well-informed speaker to head the public affairs department. "We want a person who can pick up the telephone and talk to the City, Whitehall and educationalists on a one-to-one basis. There is

no one at the RIBA who can do that at the moment."

Atwell said: "I am not going to make any statement now. If he writes to me with his reasons I will respond then."

The Macleodfield architect's challenge to the membership to council's nomination for next year's president was backed by more than 80 signatures.

They included Sir Hugh Casson, Geoffrey Broadbent, Richard Burton, Peter Cook, Cedric Price, Bob Maguire, and Keith Scott.

Hackney is standing on a

platform of radical change to the RIBA's management and staff structures. "These must be improved," he said, but told BD he was against sackings.

He also laid out his priorities which include setting up a new political office which "should encapsulate the secretary's experience to tackle government on planning, community architecture, fee tendering, and education."

Hackney is presenting a radical approach to the problems facing the RIBA. He has stated categorically he will abolish the Group of Eight because it is ineffective.

He could win a strong vote from the regions with his policies for devolution of some RIBA activities.

His strong association with Royalty (the Prince of Wales) officially opened Hackney's self-build housing scheme in Stirling (this week) and his championing of the community architecture approach to building should also win him votes.

The winning candidate will be announced on December 10 and will take over from Larry Rolland next summer.

THE three stars of the Royal Academy's "New Architecture" exhibition get another chance to display their talents this Saturday on BBC2.

James Stirling, Richard Rogers and Norman Foster are filmed at the top of a high London building by the producer of Saturday Review, John Archer.

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"joint ticket" with David Rock, who lost to Raymond Andrews in the competition for council's nomination for president.

Although the constitution does not cater for two people to sit at the head of the institute, Rock would be put forward as Hackney's vice-president if he wins.

Andrews has also hinted at forthcoming changes in the RIBA's management and staff structures. "These must be improved," he said, but told BD he was against sackings.

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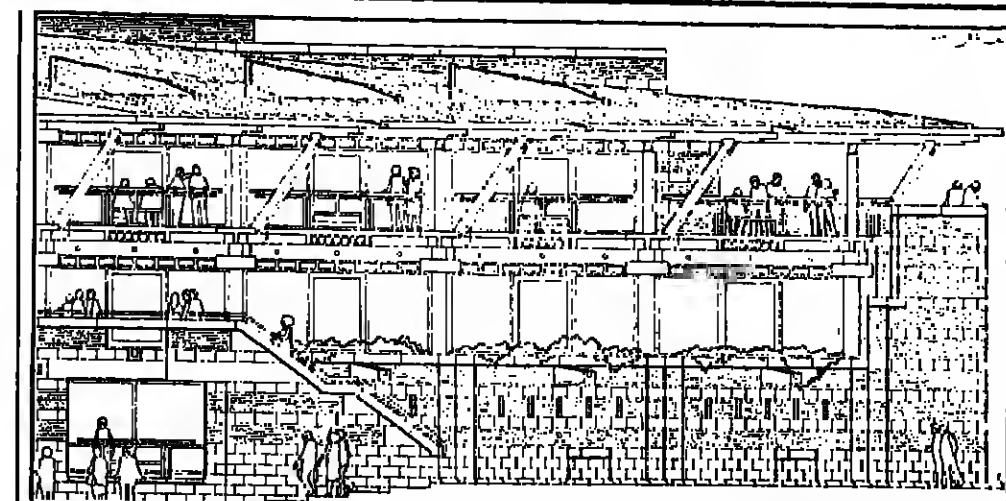
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Milton Keynes-based Denton, Tunstall, Scott here was first prize in the competition for a new residential and conference centre at Aston University.

Their scheme (pictured) was selected from eight second-round entries that were invited to develop the proposals after a total of 91 pre-entries submitted preliminary proposals.

The winning scheme consists of two L-shaped blocks (right) which are arranged in an unorthodox campus area, to bring "order and calm and some degree of civility to a difficult situation". Simple, generously proportioned repetitive concrete structural elements put together in different ways allow a complex and sophisticated form for comparatively low cost.

Bob Allen and Graham Morrison were placed second and Munkenbeck & Marshall came third to the competition.

Turners up were Bradshaw Gass & Hope, Axis Design, Hutchison, Locke & Mook, Jacob Blacker and Anthony Hudson & Robert Saba.

On the ground, meanwhile, work is in full swing and committed expenditure is running at the rate of £10 million a month. The size of phase 1 of the project has already grown from the original 340,000sq m to

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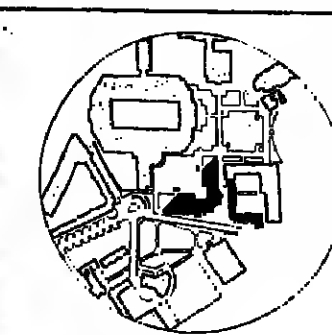
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London high-spot

PLANNING applications have been submitted this week for what would be London's second tallest building. The EPR Partnership have drawn up a 31-storey scheme for Friends Provident Life Offices and Waters City of London Properties for a block on the south side of London Wall near Seifert's Natwest tower, London's tallest. Pictures page 3.

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Koch finds his gallery

The quest of the wealthy American Edward Koch, to find an English home for his 19th century art collection, is over.

Sutton Place (above) — one of the finest Tudor houses in Britain — was bought by Koch this week for an undisclosed sum. The house was put on the market in May at more than £8 million.

Formerly the home of John Paul Getty, the Grade I listed building boasts — among other things — four galleries, a sophisticated art security and humidity system, and new smoke detectors in all of the main rooms.

Koch had been negotiating to buy St John's Lodge in Regents Park, but had to abandon his plans after English Heritage rejected his proposals to alter the interior.

Sutton Place is set in 145ha of landscaped gardens and grounds, and overlooks one of the largest domestic lakes in Europe, built by the last owner, Stanley Scagar of Wincanton.

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News

Tower Hamlets set-up

had to be called in as disrupted at a Tower Hamlets council meeting last night (October 2) over the issue of whether or not to join other boroughs in maintaining the project and it being clear that the majority were going to withdraw opposition. In an eye-witness, the group then decided to proceed and chairs were put down. The police were not at the meeting without a voice being given so, the council is not the scheme. The witness also said that the rioters were many but to be from Tower Hamlets. Ken Livingstone is also to have attended.

Tower Hamlets scheme

The Association of London Authorities — which represents the interests of all 13 Labour-controlled councils — claims that the Canary Wharf development has "strategic implications" right across London, particularly affecting road, rail and transport systems.

Improving prospects for Canary Wharf plan

A GROUP of London's Labour-controlled councils have dropped their support for an "awareness raising" publicity campaign against the Canary Wharf development in London's Docklands.

The Association of London Authorities — which represents the interests of all 13 Labour-controlled councils — claims that the Canary Wharf development has "strategic implications" right across London, particularly affecting road, rail and transport systems.

By Amanda Ballilleu

But it cannot afford a campaign of opposition.

Instead, the newly formed London Strategic Policy Unit (LSPU) should be asked to fund the campaign.

LSPU said it was too early to comment.

Meanwhile, Alliance-controlled Tower Hamlets council said it was generally in favour of Canary Wharf because it meant jobs for local people.

New leader Eric Flounders said: "Lying in front of bulldozers will produce bodies, not benefits."

The council wanted to ensure maximum planning gain from the Canary Wharf developers.

Tower Hamlets is critical of designs for West Ferry Circus — planned to act as a gateway to the development — though it has agreed not to call for a public inquiry.

The circus "lacks human scale", has to rely heavily on planting to emphasise its circular form and — despite claims — does not form a significant open space or amenity area, says a council report.

The council is negotiating alterations to the circus design.

Divis residents say tower must go too

NS to demolish the remaining access housing blocks the Divis Estate in West Belfast. The 19-storey block because it does not fit in with the same problems. It is this claim by the Northern Housing Executive is being disputed by residents. They admit that compared to the deck-access blocks the tower, with its single entrance, is better security, but given the tower residents would like to go to "proper" houses on the tower, they say.

Some say the single reason for retention is the army post on the tower and the view it gives of the surrounding area. The proposals were put forward as recommendations to the Northern Ireland minister at the DOE.

His approval is required if the plans to demolish the eight blocks over seven to 10 years is to go ahead.

The Divis residents are also committed to having some say in the plans to rehouse them.

The residents have already carried out limited consultation, hampered by lack of cash, and want to involve the entire community in drawing up plans.

Drummond out

LAMBETH council architect Mark Drummond was sacked this week for talking to the press. Drummond said he would "appeal on grounds of unfair dismissal". All other charges against him were thrown out at a council disciplinary hearing.



EPR's City giant

LONDON's second tallest building, at 31 storeys, will be built on a block facing London Wall and Old Broad Street in the City if applications submitted today by the EPR Partnership are successful.

The scheme, which covers an entire block, entails demolishing Winchester House, a 60s office development acquired last year by EPR's Principal Life Office and Wates City of London Properties from St Martins for £65.5 million. The new building, 100 Old Broad Street, would have a value of about £300 million, and its 36,000sq m of uninterrupted floors are designed for flexibility of use and geared specially for the financial market.

The site falls outside the Bank conservation area but within the cluster of tall buildings that ring the NatWest tower. Careful consideration has been given to moderate the impact of such a substantial development of such a substantial development by positioning lower attached blocks at each end of the site while the bulk of the central tower is modelled by external service shafts. A public concourse with six points of entry occupies most of the ground level and this will contain shops, restaurants and cafes. The Royal Fine Art Commission is to view the scheme soon and a public exhibition is open from October 13-17 from 12pm-2pm at 82 London Wall, London EC2. Architects: EPR Partnership. Project and cost consultants: John Shreeves & Partners. Structural engineers: Bunyan Meyer & Partners. M & E design: Building Services Consultants.

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Its track record speaks for itself. Right from the time it received the first ever British Agrement Certificate back in 1967, Hyload's been on the road to success. As the first pitch polymer DPC to be released in Britain it now has the longest experience on record and

it continues to go from strength to strength.

This year it's celebrating twenty-one years at the top.

In that time, sales alone have clocked up over 140,000 miles. That's more than enough to cover central London or the whole of Birmingham!

But it doesn't stop there. Hyload is still out in front successfully mastering intricate detailing at corners, around concrete columns

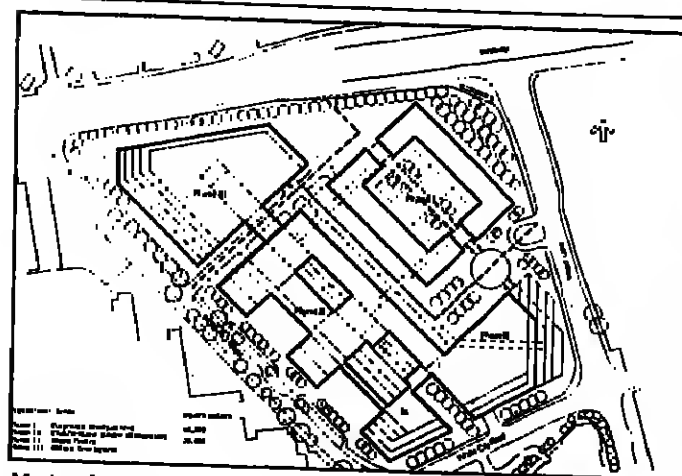
and changes of level in a style that Stirling Moss would appreciate. Which all goes to show that if you select the right gear, you'll always be miles ahead of the rest.

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Master plan.

BBC's White City giant

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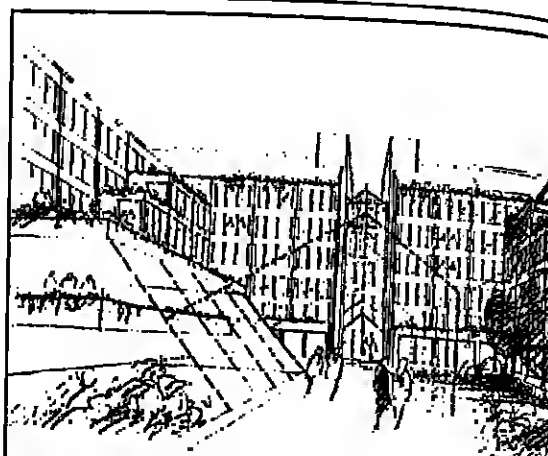
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The tenants campaign says this shows the same degree of bad workmanship and lack of attention to safety factors went into the block when it was rebuilt as went in before.

Building Design's contact George Mason, architect who left Trollope & Colls in 1984, said: "I was not known to be in the block when it was rebuilt as went in before. Would anyone else be there at that time?"

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BP ROOF COVER

Tower Hamlets bust-up

POLICE had to be called in as violence erupted at a Tower Hamlets council meeting last Thursday (October 2) over Canary Wharf.

The council was to have voted whether or not to join other Labour boroughs in maintaining opposition to the project and it was becoming clear that the Liberal majority were going to vote to withdraw opposition.

According to an eye-witness, the Labour group then decided to break up proceedings and chairs were thrown. The police were called and the meeting was dissolved without a vote being taken. Even so, the council is not opposing the scheme.

The same witness also said that among the rioters were many known not to be from Tower Hamlets. Ken Livingstone is also reported to have attended.

Docklands scheme

from page 1
520,000sq m with the infrastructure easily capable of sustaining over 580,000sq m.

It is understood that three companies, with space requirements totalling almost 140,000sq m, have board approval to go to Canary Wharf and are expected to make commitments once the MBA is signed.

Design work is now well under way for the three earlier commissions, including the first of the three towers, designed by Kohn Pederson Fox for the consortium, which will rise to the full 280m maximum permitted.

The tower will be flanked by two lower rise buildings and its top quarter will be a five-star hotel. The total floor space of the KPF design will be nearly 200,000sq m.

At the same time, SOM are designing a headquarters building for consortium member Morgan Stanley, while Credit Suisse/First Boston is having its building designed by I M Pei.

Canary Wharf now has 18 remaining "development parcels". The consortium would like to see a variety of clients and international architects designing within the master plan.

Divis residents say tower must go too

PLANS to demolish the remaining deck-access housing blocks on the Divis Estate in West Belfast exclude the 19-storey tower block because it does not

fit the same problems. It is this claim by the Northern Housing Executive which is being disputed by residents.

They admit that compared with the deck-access blocks the tower with its single entrance, has better security, but given the choice residents would like to live in "proper" houses on the ground, they say.

Some say the single reason for its retention is the army post on top and the view it gives of the surrounding area.

The NIHE proposals were put forward as recommendations to Richard Needham, the Northern Ireland minister at the DOE.

Improving prospects for Canary Wharf plan

A GROUP of London's Labour-controlled councils have dropped their support for an "awareness raising" publicity campaign against the Canary Wharf development in London's Docklands.

The Association of London Authorities — which represents the interests of all 13 Labour-controlled councils — claims that the Canary Wharf development has "strategic implications" right across London, particularly affecting road, rail and transport systems.

By Amanda Bailille

But it cannot afford a campaign of opposition.

Instead, the newly formed London Strategic Policy Unit (LSPU) should be asked to fund the campaign.

LSPU said it was too early to comment.

Meanwhile, Alliance-controlled Tower Hamlets council said it was generally in favour of Canary Wharf because it meant jobs for local people.

New leader Eric Flounders said: "Lying in front of bulldozers will produce bodies, not benefits."

The council wanted to ensure maximum planning gain from the Canary Wharf developers.

Tower Hamlets is critical of designs for West Ferry Circus — planned to act as a gateway to the development — though it has agreed not to call for a public inquiry.

The circus "lacks human scale", has to rely heavily on planning to emphasise its circular form and — despite claims — does not form a significant open space or amenity area, says a council report.

The council is negotiating alterations to the circus design



EPR's City giant

LONDON's second tallest building, at 31 storeys, will be built on a black facing London Wall and Old Broad Street in the City if applications submitted today by the EPR Partnership are successful.

The scheme, which covers an entire block, entails demolishing Westchester House, a 60s office development acquired last year by Friends Provident Life Office and Watney City of London Properties from St Martins for £65.5 million. The new building, 100 Old Broad Street, would have a value of about £300 million, and its 36,000sq m of unwaterproofed floors are designed for flexibility of use and geared specially for the financial market.

The site fills outside the Bank conservation area but within the cluster of tall buildings that flag the Newgate tower. Careful consideration has been given to moderate the impact of such a substantial development of such a substantial development by positioning lower attached blocks at each end of the site while the bulk of the central tower is applied by external service shafts. A public concourse with six points of entry occupies most of the ground level and this will contain shops, restaurants and cafes. The Royal Fine Art Commission is to view the scheme soon and a public exhibition is a prelude to October 13-17 from 12pm-6pm at 82 London Wall, London EC2.

Architect: EPR Partnership. Project and cost consultants: John Shreeves & Partners. Structural engineers: Bryan Meyer & Partners. M & F design: Building Services Consultants.

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USM firm names day for flotation

DEALING in the shares of architecture's second recruit to the Unlisted Securities Market will begin next Wednesday, October 15.

Whinney MacKay-Lewis launched their placing document yesterday in preparation for the flotation on Wednesday. The document includes details of its plans for future growth, share price and rating and profit forecast for the year ending April 1986.

Consortium anniversary

A SYMPOSIUM to mark the 25th anniversary of the Second Consortium of Local Authorities is being held in Gloucester next week.

Property Services Agency design director, Bryan Jefferson, will be delivering the keynote speech at the meeting, which takes place on October 14 and 15.

Further details from Ian Cook at the consortium's Gloucester headquarters, tel 0452 25241.

Regulations a problem

ARCHITECTS have yet to come to grips with the revised Building Regulations and are relying too much on building control officers for advice, says Harry Chesterton, president of the Institute of Building Control. He criticised the profession during a debate on the building industry chaired by television personality Cliff Michelmore.

Honorary nominations

RIBA members are invited to submit nominations for honorary fellowships to be awarded in 1987.

Anyone except Britons eligible for corporate membership of the Institute may be elected by reason of their eminence and interest in architecture and the arts and science connected therewith considered by the council to be

eligible for the honour of honorary fellowship". Nominations should be sent to the Patrick Harrison by December 31, including the name and address of the nominee, and brief statement on why the award should be given. If the person's work is not widely known, references to sources of information would also be helpful.

Atwell calls for Whitehall cash boost to halt decline

THE Government is toying with the problems facing Britain's crumbling public sector housing and infrastructure, claimed RIBA public affairs director David Atwell this week.

In a speech at the Building 86 exhibition in London, Atwell condemned Government failure to let local authorities use capital receipts for housing repairs, and called for a major increase in funding.

He said a gradual build-up of capital investment in the public

sector was essential if we were to avoid an accelerating decline of our building stock.

Better management and maintenance policies for housing estates were also necessary, while demolition of tower blocks or deck access estates should only take place if repair was too expensive to consider.

Atwell argued for local authorities to remain the catalyst for initiating work to solve the inner-city crisis.

"The creation of urban development corporations and

moves towards concentrating power and funding in government will not solve the problems of local communities and accountability."

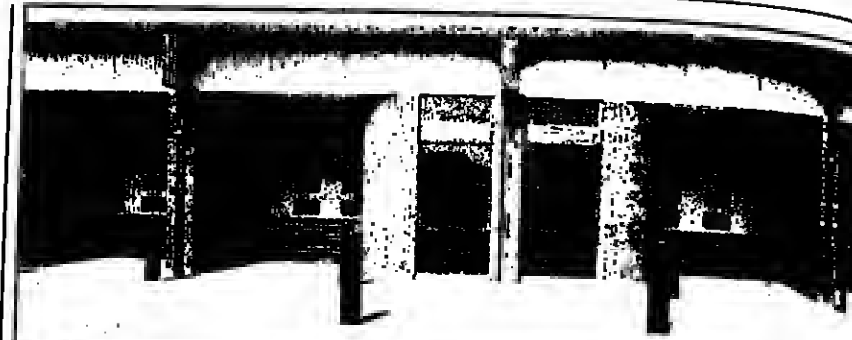
But he urged greater involvement of the private sector in partnership with council, praising the partnership scheme launched by contractor Lovell.

Combining on freeport plan

The West Midlands Freeport development at Birmingham's International airport has just been completed by a consortium of local councils. The freeport — the first inland project of its kind in the UK — consists of 11 large warehouses together with a cargo centre.

The centre, which is the size of a soccer pitch includes office space. The 11 warehouses in the freeport area itself can be sub-divided into smaller units.

The practices involved in Associated Birmingham Architects are Phillips, Cutler, Phillips, Troy and Temple Cox Duncan.



Councillors want say on colours

COUNCILLORS in Oxford want to introduce an extra stage of consultation with architects over the colours and materials used on council housing.

At a council meeting last week members of the housing committee suggested they ought to have more say on matters of taste versus durability.

But director of housing Bill Brown said: "I think in terms of material use the most important thing is maintenance."

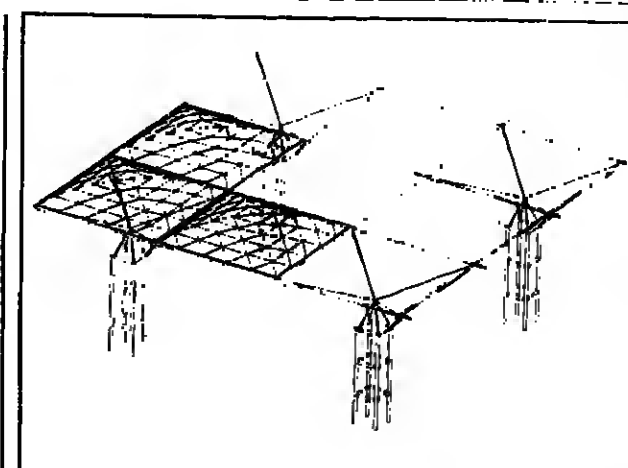
Council officers will now report back on the feasibility of an extra consultation stage.

Demolition plan

TAUNTON Deane Council is to demolish 100 pre-cast reinforced concrete homes on the Holway estate in Taunton because of the high cost of repair. The estate will be rebuilt.

Arups hired for Foster's new Stansted terminal

Ove Arup & Partners have been appointed consultant engineers to the British Airports Authority for the initial phases of the new passenger terminal at Stansted Airport which has been designed by Foster Associates. The contract, which covers a prestressed steel roof, the terminal building and part of the forecourt, entails the use of 2,800 tonnes of steel (rolled with 110,000 cleats, lugs and brackets), 4m of profiled metal deck, 35,000 cubic metres of concrete and 5,000 tonnes of reinforcement. The terminal roof, illustrated here, is designed to give 36-metre spacing in the concourse, while roof panels only have to span half that distance. Erection is scheduled for the spring and summer of 1987. Arups at the Academy pages 30-35.



News

US survey finds architects working without insurance

MANY American architects are working without adequate insurance cover because it is so difficult to obtain.

This alarming state of affairs is revealed in a report by the executives of six top architectural and engineering companies together with the US Society for Marketing Professional Services.

It says the number of insurers for architects has dropped from 12 to three and that the chances of an architect or engineer being refused insurance range from

one in four to three in four.

One of the authors, James Poirer of Corvallis, reported that his company's cover had dropped from \$100 million to \$6 million in three years and that it was doing \$300 million of work without cover.

By John Wood

"We will now walk away from high-risk projects if the clients won't indemnify us with insurance," he said. "We have walked away from more than \$10 million in fees during the last six months alone."

Other companies were said to be "self insured" to a much greater degree than they were admitting publicly.

In their defence, the report says that less than half the claims against architects come from clients and that more than two-

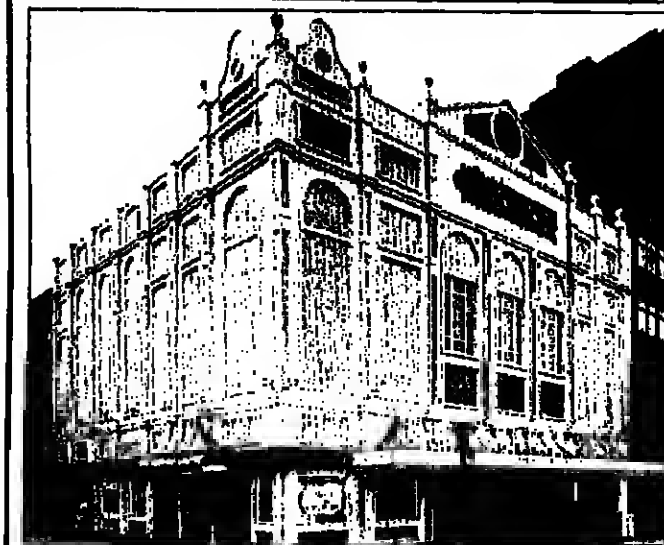
thirds of cases are found in their favour.

Architects have been tackling the problem by either agreeing a limit to liability in the contract or by exploiting a US law which allows large clients to include design work in their insurance cover.

The report costs \$7.50 from SMPS, 801 N Fairfax St, Alexandria, Va 22314 JS.

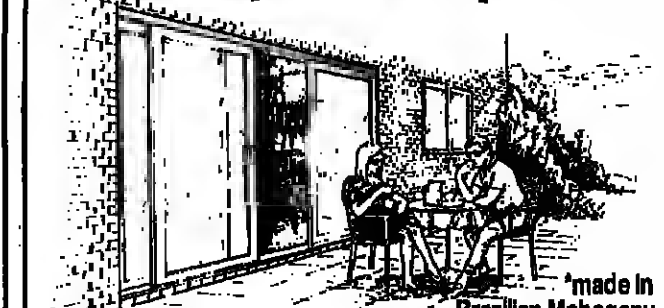
● Lester B Knight & Associates of Chicago is being sued by the Illinois Capital Development Board over the design of the air-conditioning in its Chicago offices (architect Helmut Jahn).

It is claiming damages and attempting to force the company to repair the cooling system for its 17-storey block arranged around an atrium, but Knight claims it meets client specifications.



Refurbishment of the Birmingham Hippodrome to give it a new facade took a mere 10 weeks from initial briefing to final fixing by Alan Butcher Associates. Architects Seymour Harris Partnership specified mauve, cream and white Alcan gyp for the main facade panelling, and for decorative canopies, copings, finials and cornice detailing. The contract completes the fourth phase of a refurb and redevelopment programme undertaken by the Theatre Trust since 1980. The former West Midlands County Council provided a £350,000 grant for the work.

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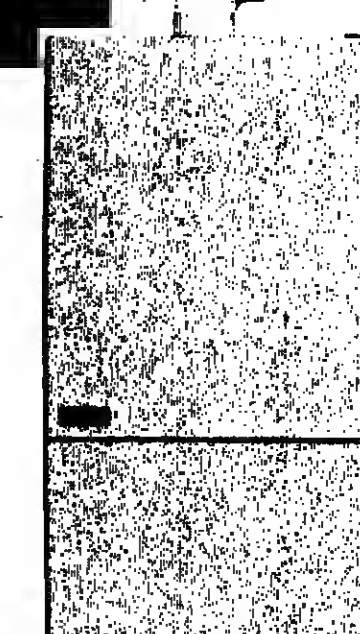
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Builders hit by council VAT policy

BUILDING firms in the Midlands are being forced to suffer unnecessary financial hardship over VAT payments because of Birmingham City Council's payments policies, local contractors claim.

The council's VAT payment system forces firms to break the law or suffer severe cash-flow problems, according to one contractor.

Builders working on urban renewal projects are given monthly payments for work carried out. They then have to pay VAT on those payments. But the council does not make a VAT payment to the builder until completion of a job, which could be up to a year later.

The council has pledged an immediate investigation and has promised to change the paying system if necessary.

Lambeth cash plea

LAMBETH council says £148 million must be spent on housing in the borough next year to avoid a "housing disaster".

Lambeth's claim is made in the borough's 1987-88 Housing Investment Programme (HIP), the annual cash bid to the government for new house-building, renovation and repair.

Engineer's claims on Ronan Point shock local team

VOIDED joints found in Ronan Point are well within safe tolerance levels, according to one of the engineers responsible for supervising the original design for Taylor Woodrow Anglian.

Barry Rusoff of Phillips Consultants, the firm which supervised all of the blocks built to the Larsen Nielsen system in this country, told *BD* "the flank wall joints do not need to be fully packed" and only 50 per cent of the mortar specified could be sufficient.

He conceded that the H2 joints at the bottom of the tower would be carrying more "dead weight" and consequently would need more mortar to support the loadbearing flank walls, but said: "Some voiding would not make them unsafe."

Rusoff's claims have shocked local authority experts examining the findings in the controlled demolition of Ronan Point. They have labelled the voiding as a "major defect".

The London Borough of Newham has found:

- Hand-packed mortar in the H2 joint is up to 50 per cent less than specified by the building's designers.
- The in-situ concrete is poorly compacted with voids existing beneath the horizontal reinforcement bars.

By Alan Thompson

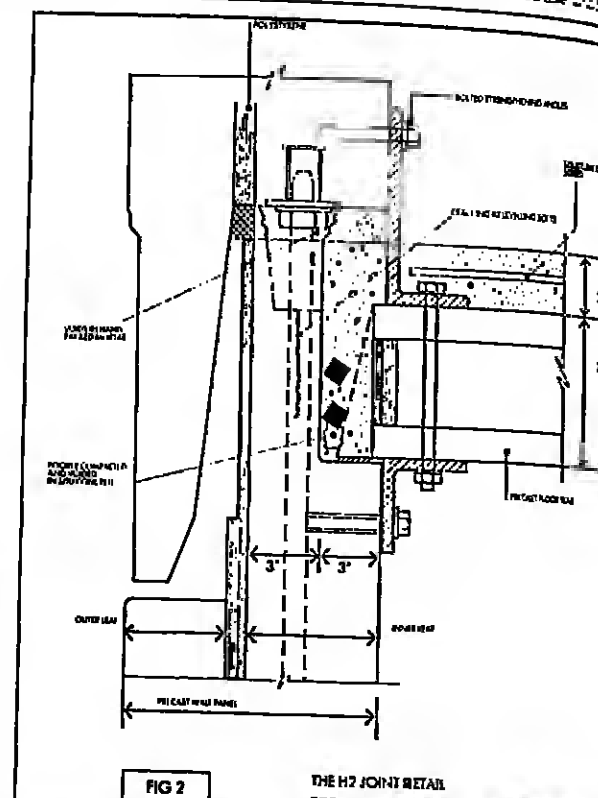
- Levelling nuts had not been wound down after the hand packing had been carried out and a significant amount of the load was being transferred via the bolts.

These defects have led to uncertainty over the actual path for the flank-wall loads. Newham's engineers have found that the strengthening angles were taking some of this load and that the flank wall joints would rotate under extreme loading conditions.

This could cause an alteration from the existing load path to one which had not been proven and there could be no guarantee on the stability of the building in a fire or if an explosion occurred.

Ronan Point campaigner Sam Webb said: "If the explosion which caused the collapse of Ronan Point in 1968 had not occurred, the block is so badly built it would have fallen down on its own accord."

Newham is not taking any succour from Rusoff's remarks. In fact the borough is particularly worried about the standard of workmanship on the lower floors. Engineers say workmanship at that level is more critical.



H2 joint detail showing strengthening and concrete voiding.

Seminar aims to put faith into the planning system

A DEVELOPMENT Control seminar to explore how the Christian faith should affect planning is being held by the Association of Christians in Planning & Architecture on Saturday, October 18, at the St Clement's Family Centre, Cross Street, Oxford.

Speakers will be Pete Broad-

bent, chair of development and planning for Islington council, and Peter Robottom, the borough planning officer for Brighton.

Tickets cost £10. Details from the University and Colleges Christian Fellowship, 18 De Montfort Street, Leicester LE1 7GP, (0533) 551700.

The future of cities

A CONFERENCE on the future of city centres sponsored by Yorkshire branches of the RIBA, Royal Town Planning Institute and Royal Institute of Chartered Surveyors will be held at Kings Manor, York, October 15.

Details from RIBA Yorkshire Region (0532) 456250.

Commercial hitch for Spitalfields

DISAGREEMENT over the future of Spitalfields Market is threatening to delay redevelopment plans by architect Richard MacCormac and developer London & Edinburgh Trust.

The City Corporation, which wants maximum commercial value from its site, is at odds with the planning authority, Tower Hamlets, which wants to limit the office space but increase the housing, open space and amenities.

MacCormac is working on radical changes to the original scheme following requests from Tower Hamlets that the office content be limited to 50 per cent of any development of the area.

But a spokesman for LET said: "A middle way between the City and Tower Hamlets has to be found, otherwise there will be no development at all."

The council has still not seen the scheme by developer Stuart Lipton, with a master plan by Leon Krier. Krier has met Tower Hamlets twice, but is said to be a long way from producing a first draft.

Housing plan

HAMMERSMITH & Fulham council is planning several schemes to cope with rising homelessness including a short-stay development unit, locating sites for new hostels, and a new-build programme.

Tiny entry for Drawings competition

THE RIBA's search for an architect to design a drawings gallery for Portland Place has had an embarrassing start.

The competition for this prestigious project, launched in July, attracted just 30 entries by the closing date of September 30.

Norman White, of the institute's Clients Advisory Service, admitted the tiny entry was "disappointing".

But he suggested: "Perhaps

By John Wood

quality will make up for quantity."

The panel of assessors, chaired by Michael Manser, is now supposed to select a shortlist of six when it meets on October 13.

White would not voice an opinion on the entries before the assessment, but neither would he confirm that all six shortlisted architects had to come from the original 30 entrants.

Many potential competitors may have been deterred by the vagueness of the entire project.

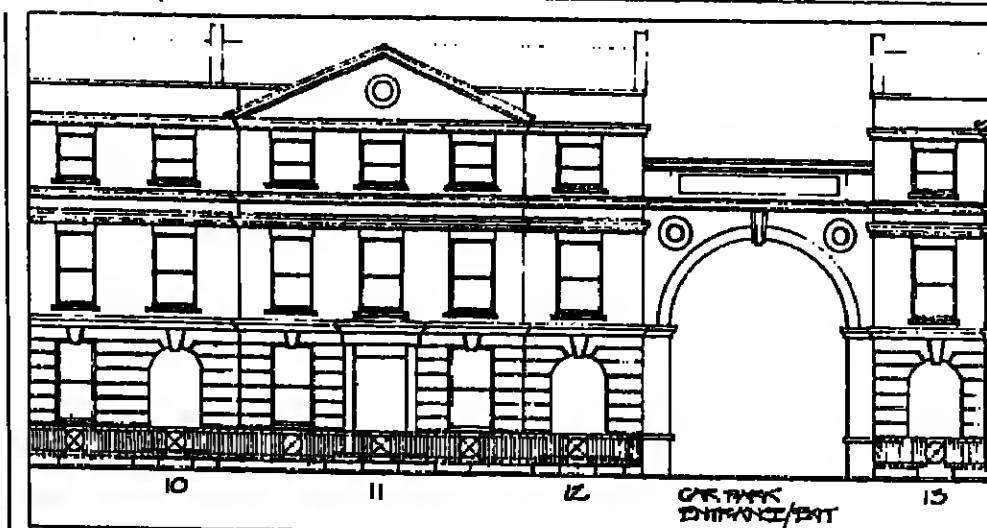
The competition's first stage simply asked for an A3 panel demonstrating the entrant's design ability, a CV no longer than two sheets of A4 and 250 words on their approach to the project.

The shortlisted six will be given the competition brief and be expected to attend a "teach in" at the RIBA on the history of the scheme.

They will receive a premium of £3,000 and be required to make a presentation of their approach to the problem.

The winner of this stage will be commissioned to take the proposals to the final design stage.

But the competition's rules state that the project depends on necessary funds being raised and admits that the institute is unable to give a commitment to build the whole of the work and that a phased development may be necessary.



Site lined up for transformation

A major development is set to transform a derelict 0.75ha site in the West Greenwich conservation area. The project comprises an 80-bedroom hotel designed by Building Design Partnership, sheltered housing scheme by Twigg Brown & Partners and an office, retail and housing scheme

(pictured) by Moxley & Frankl, not Moxley Jenner & Partners as reported in the September 12 issue. The project will provide new sites for the market which occupies part of the land and parking for 150 cars. It has also secured a £728,000 urban development grant from the DoE.

Corn Exchange scheme back to the committees

ALSOP Barnet & Lyall's plans to cut a 5m diameter stair entrance into the basement floor of the Corn Exchange have been referred to yet another council meeting for further talks.

The controversial scheme, which is part of a plan to turn the Grade I-listed building into a major shopping complex, has been referred to a special joint meeting of the planning and development committee, the industry committee, and the

municipal services committee.

These three groups selected the scheme, backed by developer Mount Provincial & Speciality Shops, after considering other proposals which were aesthetically more acceptable but not as financially viable.

Alsop Barnet & Lyall plan up to 2,000sq m of retail space for the building. They expect to put in a planning application at the end of the year.

Ridley plan attacked

STRONG criticism of the environment secretary's consultation paper on the future of development plans has come from the Association of County Councils.

It says national government should interfere less in county planning rather than give councils a detailed blueprint, and claims the environment secretary's intervention is the main cause of delay.

Normal fire regulations require that any shopping mall, no matter how large or small, must have fire ventilation.

When it can take up to 30 minutes to empty a crowded shopping centre, but only 3 minutes to fill it with deadly smoke, fire ventilation can be a major concern.

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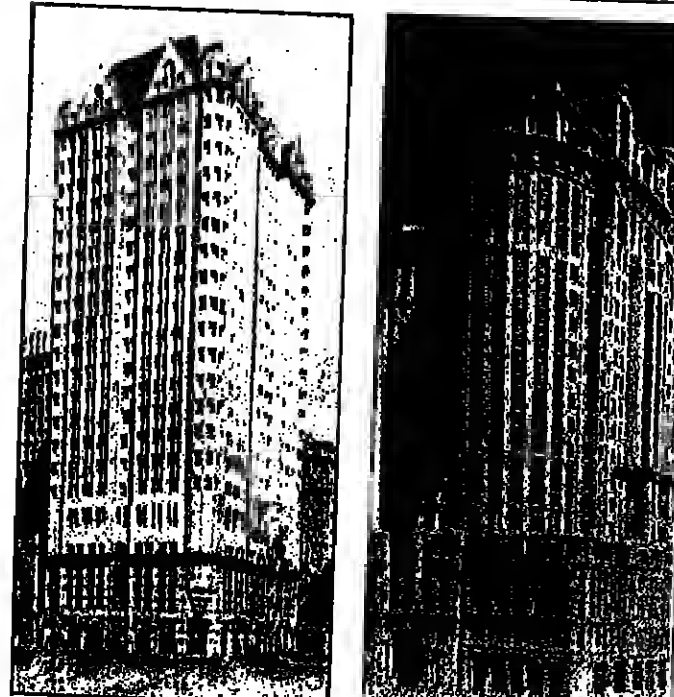
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Victorian values, to the tune of \$75 million and \$100 million dollars respectively, are back in American real estate. These towers, by Albert C Martin for Los Angeles (left) and Kohn Pedersen Fox for Boston, are both expected to be ready for occupation by autumn 1988. Both are intended to complement their historic neighbours. The former is in the "French Renaissance" style of the Loire Valley and the latter incorporates four existing buildings that wrap around the site at ground level.

Message for designers on Legionnaire's Disease

INCREASED uniformity in design, installation, operation and maintenance of equipment is needed to combat the spread of Legionnaire's Disease, says a top Property Services Agency official.

Ronald Oughton, head of building services at the agency, told a London conference that architects and developers need to understand more about the disease to be able to fight it.

Designers should also acknowledge that their role goes beyond seeing the job built. They should also ensure the equipment (in this case the air-conditioning equipment) is easily operated, maintained and replaced if necessary.

Another speaker questioned the current policy of switching from wet cooling towers to refrigerated dry alternatives. Christopher Bartlett, of the Communicable Disease Sur-

By Alan Thompson

veillance Centre, said it would be better to spend money on maintenance.

His research showed domestic hot water systems were more likely to spread the disease than air-conditioning.

There are up to 200 reported cases of Legionnaire's Disease in Britain each year. To date the outbreaks have been associated with hotels and hospitals, usually in males over 55 who

smoke and who have an underlying illness.

Legionella pneumophila bacteria is common and develops in water.

The organism is found in rivers, lakes, and wet soil and has been found in 60 per cent of public and hospital buildings.

The most common locations for the bacteria in buildings are in the hot-water service systems and air-conditioning cooling water systems.

The infection route requires the contaminated water to be sprayed into the air and for this aerosol to be inhaled by an "at risk" person.

Dr Geoffrey Brundrett, of the Electricity Council Research Centre, said engineers and designers must acknowledge that there is a "strong likelihood" of very low concentrations of the micro-organism existing in all open water systems. It was up to them to prevent multiplication of the cells.

The most favourable conditions for multiplication of the bacteria are temperatures of between 25 and 40deg C. The multiplication rate declines at higher temperatures and ceases completely at 45deg C. At 70deg C the organism is killed instantly.

At the lower end of the scale, although the bacteria does not multiply below 20deg C, it can lie dormant at temperatures

below freezing and activity resumes at temperatures above 0deg C.

Water aerosols are mainly produced by spraying, evaporation systems and whirlpools and spas.

Hot-water service systems are usually designed to maintain a volume of water which is distributed throughout the system. Long "dead legs" should be avoided. Cold-water supply pipes should be thermally insulated to keep hot water out of the zone.

The fatal outbreak at a hospital occurred in warm weather when the cooling circuit for the water was called into service.

This led to more water being pumped through the system at higher temperatures and longer at these higher temperatures.

The water was at a temperature where it could multiply in the system.

Disinfectants in the water accidentally under test did not result in the water being disinfected. The water was pumped into the hospital via an air inlet supply.

The conference was held by the Air-conditioning Industry Board.



Ron Oughton, head of building services, PSA — check equipment.



Geoffrey Brundrett, Electricity Council Research Centre — basic design.

Design steps to take

Dr Brundrett recommended that designers should:

- specify equipment which avoids keeping water at between 20 and 45deg C;
- take steps to minimise the dispersal of water as an aerosol by incorporating draught eliminators

in cooling towers; minimising splashing; pressure taps and valves; separate "at risk" from contaminated water; locate the cooling away from openable fresh-air inlets.



David Backhouse & Associates have sprung up as 1986 office in Manchester into a major shopping centre by the addition of a "Library" type rear entrance. Glasswork for the arcade in St Ann's supplied by Holloway PPG.

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HRH The Prince of Wales, 13 June 1986

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Planning

Taking a tougher line on delays in the system

Tony Aldous analyses and compares the recommendations of two recent major reports on ways to improve the regional and local strategic planning system.

IT is 13 years this month since Geoffrey Rippon, when environment secretary, responded to widespread complaints about the shortcomings of development control by appointing his fellow QC George Dobry to conduct a review of the system.

It was in 1975 that Dobry's wide-ranging report was published, by a different environment secretary (Anthony Crosland) and from a department whose reaction seemed to many (including Dobry) to be lacking in urgency.

Since then the DoE has gradually implemented many of the Dobry proposals, but planning is again in crisis. Some of the reasons for this, along with fresh proposals for reform, are to be found in two new reports published, coincidentally, within days of each other at the end of September: the *Fifth Report of the House of Commons Environment Committee: Planning: Appeals, Call-in and Major Public Inquiries*; and *Town and Country Planning: A Report to the Nuffield Foundation*.

The two reports are very different, but can be regarded as

usefully complementary. Nuffield (chaired by Lord Flowers with a membership which included Sir Frank Layfield, former RTPI president, Jim Amos, and the late Wilfrid Burns, sometime DoE chief planner) took a broad, long look at the planning system as a whole — at what society should expect of it, and how best to achieve that.

The select committee, chaired by former DoE minister Sir Hugh Rossi, focused more narrowly and in a more concentrated way on ways to remedy present defects, and above all

the huge and apparently intractable delays in giving planning applicants decisions at both local authority and appeal stages.

Delays there certainly still are. The select committee report (for brevity, "Rossi") indicates that, whereas about 86 per cent of applications are eventually approved, in some 33 per cent of cases the local planning authority fails to meet the statutory requirement of giving a decision within eight weeks.

It was Michael Heseltine who estimated that councils kept

about £8,000m of development potential locked up in their filing cabinets; more recently a DoE minister, Lord Elton, has stated that planning delays in written appeals alone cost Britain some £2 million a week.

There is, of course, an element of hyperbole about such statistics. Planning, like any other business, inevitably locks up some capital temporarily pending decisions. Justified criticism focuses on the proportion of that lost potential which is locked up for longer than it need be. On this Rossi takes a

commendably tough line.

His chief weapon is costs, used as a sanction to ensure compliance with statutory time-tables, but also to discourage time-wasting conduct by both planning authorities and applicants.

Thus a council which refused an application on grounds other than "justifiable planning reasons" and lost on appeal, would stand not only to have costs awarded against it, but to compensation for loss. On the other hand, a developer who appealed a second or third time with a similar development on substantially the same site, and lost, could have costs awarded against him.

Costs are also used to hack the second leg of the Rossi strategy: getting the parties to negotiate in advance and to agree in great proportion of the facts as possible. The committee urges costs penalties for failure to negotiate, and for failure to produce evidence to counter alleged facts if you failed to agree them of the pre-inquiry stage.

Where an LPA failed to negotiate in the first three months after an application, the applicant could appeal straight away without waiting the full six months.

More inspectors

What in essence Rossi is saying to the parties is: "Get your act together. Define the issues, and concentrate the inquiry proceedings on those. If you don't, you'll be penalised". To back this up, he wants more inspectors, full-time and part-time, and would arm them with statutory powers for setting and enforcing time-tables, both for pre-inquiry exchange and a circulation of evidence and at the actual inquiry.

One of the points at which Rossi's and Nuffield's recommendations meet is in calling for central government to provide clear policy guidelines in advance of inquiries so that strategic issues do not need to be thrashed out unnecessarily. A planning inquiry commission may be an appropriate form for this; a public local inquiry is not.

Where Nuffield goes much further is in urging, in effect, a "separation of powers" between central and local government. National policies (continuously reviewed) should be promulgated regularly to cover development where the national interest is genuinely affected; otherwise local planning authorities should be left to work out local policies (again continuously reviewed) to suit the needs of their communities. Centralised criteria are neither desirable nor workable.

Nuffield would also like to see LPAs taking a more positive role in, for instance, buying

outdated permissions and opening up their entrance. But for this, as indeed for operation of effective planning strategies, they have assured sources of income and not the subject to the "go" of central direction.

The Nuffield committee clearly heard local government's plea, "Which of our bricks", and agreed. Like Ridley, Nuffield's structure plans phase out proposals for three-tier framework, set within a policy framework, and to genuinely national core regional strategies, however by DoE regional office and local government, and plans.

Extra layer

But whereas it grasps the abolition of structure plans unaccountably balks at, to many will seem the inescapable conclusion — abolishing remaining counties. The region is a sensible strategic planning unit; as (as the 1973 Maudsley demonstrated) is not.

Fruiting to grasp this, Nuffield finds itself recommending an extra layer — "a strategy" and "county development plan" sitting between "regional" and "local" plans. This layer we can do without.

Three other Rossi recommendations can be mentioned briefly — its proposals on inquiries; on "third party rights"; and on "call-in".

On call-in, it is, based asking for a more consistent line. Try to define the kinds of cases likely to call in, it says.

Among those to be called more frequently would be applications where the authority may have a past interest in the matter; parties in have a right to call-in in certain circumstances. On minor inquiries ("special minor"), Rossi urges government to take good look of the costs and benefits of "paying financially disabled" by proposals subject such inquiries.

Compensation

What it seems to be saying is that compensation could be the nation less than the nation of a longer, more contested inquiry. In the case of other inquiries, more to plan to concentrate on the rest issues and a repetition and time wasting.

This brings the select committee to what for many long seemed a logical conclusion — that the government should give those who voluntarily environmental groups a "help to decide policy and inquiries" assistance towards the costs of doing so.

There are two justifications for this. Justice, of course, also efficiency. Objectors given adequate resources to research present their case more effectively to be able to play their part making the inquiry process shorter and more effective. House of Commons 181-4, 181-5, 181-6, 181-7, 181-8, 181-9, 181-10, 181-11, 181-12, 181-13, 181-14, 181-15, 181-16, 181-17, 181-18, 181-19, 181-20, 181-21, 181-22, 181-23, 181-24, 181-25, 181-26, 181-27, 181-28, 181-29, 181-30, 181-31, 181-32, 181-33, 181-34, 181-35, 181-36, 181-37, 181-38, 181-39, 181-40, 181-41, 181-42, 181-43, 181-44, 181-45, 181-46, 181-47, 181-48, 181-49, 181-50, 181-51, 181-52, 181-53, 181-54, 181-55, 181-56, 181-57, 181-58, 181-59, 181-60, 181-61, 181-62, 181-63, 181-64, 181-65, 181-66, 181-67, 181-68, 181-69, 181-70, 181-71, 181-72, 181-73, 181-74, 181-75, 181-76, 181-77, 181-78, 181-79, 181-80, 181-81, 181-82, 181-83, 181-84, 181-85, 181-86, 181-87, 181-88, 181-89, 181-90, 181-91, 181-92, 181-93, 181-94, 181-95, 181-96, 181-97, 181-98, 181-99, 181-100, 181-101, 181-102, 181-103, 181-104, 181-105, 181-106, 181-107, 181-108, 181-109, 181-110, 181-111, 181-112, 181-113, 181-114, 181-115, 181-116, 181-117, 181-118, 181-119, 181-120, 181-121, 181-122, 181-123, 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Methods unfit for Third World

From John Shelley, Overseas Development Administration
I AM still trying to decide what lessons are to be learned from Jim Antoniou's article (September 12) for every proposal he makes, he explains elsewhere why it cannot work.

Of course we can all quote apocryphal stories such as his about the German prefabricated school system. We all know, too, the story about granny's body on the roof rack. He is correct in saying that foreign financing usually implies centralised management; with most bilateral or multilateral aid being on a government-to-government basis and frequently comprising large programmes; there is no workable alternative, particularly when one is dealing, for example, with one project for several hundred schools.

In one paragraph he champions the cause of building with local materials, such as the mud of Sudan, but shortly afterwards admits that the consequent reduction in quality of construction results in inadequate maintenance. What could be more inappropriate than that? Not to speak of the acute absence of local construction capability!

No responsible aid organisation puts money into the bricks and mortar of school buildings without regard to the overall teaching situation, teacher/pupil ratios, class sizes and teaching methodology etc, and a suitable teaching environment, as created by the school buildings, is just one more teaching aid.

In the really needy situation one may well have an enrolment of 100 or more in a primary school with only one teacher, and an age distribution from 50 per cent in standard 1 to 5 per cent or less in standard 7. Combine this with the introduction of learning by doing rather than learning by rote, and you have, inter alia, the requirement for a large, flexible area, with high natural lighting levels, but adequate shading, good cross-ventilation for children squatting on the floor, but protection from driving monsoon rains.

In 25 years of involvement in building in the less developed world I have come across few, if

any, traditional building techniques which could produce such a building: what have I missed, Jim?

Even when one could possibly involve the community in the building process—and presuming that they have any time and energy left after their struggle for survival—there remains the problem, which he identifies, of the technical assistance necessary to organise this. 100 scattered schools could require 100 competent organisers, and developing countries do not have these kind of manpower resources.

As to involving the beneficiaries in the design process and in deciding priorities, in my scenario (and one present involvement) the beneficiaries are 5-9-year-old children, of illiterate tribal families whomay have never seen a permanent school building. With the best will in the world, I cannot see what positive contribution they can make. They can, however, make very negative contributions, as I know to my cost. If the next village has a "pukka" building, of the entirely inappropriate type which Antoniou illustrates, perhaps with a leaky flat roof, small windows and as hot as an oven by the end of the day, that is apt to be the limit of their conception and ambition; that is what they will ask for, and anything different will be inferior.

Antoniou's delightful sketch illustrates precisely the type of inappropriate, engineer-designed, "pukka" school building prevalent on the Indian sub-continent, with its equivalents worldwide, which we are trying to move away from. But did it not occur to him that the reason for the classes being held outside might be because the outdoor environment was better than indoors and a better place to teach, particularly if there is a shady tree nearby? This is no barrier to learning: witness the rise to power of Dr Banda, president of Malawi, who never tired of reminding us that his primary education took place under a tree.

In fact, I would dispute entirely Antoniou's final contention. Nowhere in the world has the lack of a cost-effective building meant no primary school. If there is a teacher there

will be a school; in a rented room, under a tree, in a cowshed while the cows are out, or against a wall in the open air; the building, however important its contribution, is the least important element in the equation. A good primary school teacher will teach well anywhere, but the best building money can buy will not help a bad teacher.

The lessons I have learned are that one should utilise local techniques and materials as far as is possible without compromising the function of the classroom; to provide the minimum acceptable structure, perhaps no more than a skeleton frame or two end walls and a roof, and to try, through the teachers, to provide guidance as to how the community can be involved in the further improvement of the school.

In a current project in India, the local project architect is producing a teachers' handbook with ideas for building improvements, site development, play sculptures, advice on tree-planting, simple furniture, space dividers, display screens etc, designed to be made with local, possibly free, materials and written in the local language. This, I am sure, is the better way to involve the community. Limited financial resources can then be concentrated on providing a basic, sound structure that will withstand the probable complete absence of maintenance.

John Shelley
London SW1

Minefield of admissions

From P E Goodman, Portsmouth Polytechnic
FRONT page alarm and despondency seems to be the hallmark of Amanda Bailieu's article (September 19).

The Portsmouth school of architecture has not been "thrown into confusion" and there will be eligible students "without places" under any system unless every higher education course is based on spare places, even for late-comers. Also, if one is going to understand the system, let us have the initials correct, it is PCAS not PECAS.

The entry system to polytechnic over the years has developed into an art. Some admissions tutors carry out interviews for the department; some departments admit without interviews. Whichever system was used in the past the tutor responsible developed a "feel" for the recruitment which on the day of enrolment left the number of students just about on target; a skill to be admired.

The introduction of PCAS brought with it a subtle change. In the past potential student had paid for UCCA entry and filled all five slots on the form. Wise applicants covered the A-level low pass situation with one or at most two polytechnic applications; some didn't bother at all. With PCAS, if you have to pay, then "fill up the form, for all four places", was a popular approach. Thus polytechnics realised that they were facing a pick-a-back system, PCAS on UCCA. No one had played this game before and so very careful watch had to be kept as to how one could develop a skill under quite new conditions and in one year hit the target figure.

All the old skills of estimating wastage were revised and rethought in an effort to judge the right way to step. Indeed, it has been a minefield, but only fools thought it would be otherwise. The teachers' dispute hasn't come into the reckoning in my view. Decisions have to be taken on the potential at interview and/or in references; a long and arduous task. It has meant much midnight oil for the admissions

and tutors. The introduction of a new "computerised" system in concert with another of similar style on a national basis was going to be a difficult task from day one. PCAS has been slow and inefficient in some areas but this was to be expected by anyone who thought about it for a moment or two. The clearing system has been hard work. The judgment surely is whether the system is basically good and, will it settle down? Yes, is the answer. It is good news and will be better when it settles down. However, let us keep the "experts" away from changes for changes sake. A mistake PCAS has made is to "wash up" on the effects before the enrolments are completed.

The monitoring process for entry under PCAS should have been continuous since first applications arrived in September 1985. That has meant monitoring all the time, particularly during the summer vacation where all the fine-tuning has been done. The frequent discussions on the entry state will be a deal easier for the 1987 entries. We will know the tune and the words a little better by that time.

I wonder how many polytechnics are collecting and sifting data on this year's entries. A careful study of the system, with results achieved, will bear fruit. However, there will be those who throw away the files until crisis time next year. How many polytechnics have really understood the clearing system and used the sluice gate to open and close to good effect? My advice is to grip PCAS, refine one's own style of approach and settle into what could be a very efficient system producing better-than-expected results for students. Let us wait and examine the A-level score of 1986-87 intakes rather than agonise over a drop in entry requirements. As for how many will turn up on the day, no one has ever known that as an exact figure; that would be harnessing human nature—an impossible task.

P E Goodman
Portsmouth

As a practising clerk of works, I cannot understand, if those who work in the industry are providing works to specification and good practice, what it is they have to fear from an approval process that could save time and money in the building industry.

Bob Hewitt
London W5

From Francis Collett
HAVING been part of the design co-ordination team who helped to create the National Garden Festival, I felt I had to put some sort of reply to Robert Holden's feature (September 19).

Holden's comments are typical of many landscape architects "on the outside". As the festival draws to an end it will, no doubt, become the fashion for many of my fellow professionals to become "garden festival analysts".

I hope, however, that they take care to establish the facts and perhaps even keep enough to attend the recent Landscape Institute national conference, where many of the myths and untruths were dispelled by a whole range of relevant speakers. I am sure Holden would have been satisfied with that background knowledge.

Ultimately we have to accept that it does not matter what landscape architects write or say, because they have to work "call the tune" and "pay the piper". In the final analysis, it is the public who matter, and at Stoke-on-Trent there has been a satisfaction rate of 95 per cent, 1,500 new jobs created and the city warming to the festival, wars and all.

Holden's comments are minor, superficial and personal. There are no glaring omissions

or defects on the national garden festival site, design-wise. The product is good, considering the time scale, the budgets, and the weather. Many of his comments are a result, perhaps, of a lack of understanding about the site (the links are some 10m above canal level, hardly the best place for a marina), the Potteries area, the reclamation of the site (topsoil substitutes were used, very successfully), or the client.

The festival is a commercial one and has already attracted £6 million in sponsorship, as a result of not having international restrictions placed upon it. Commercial pressures were strong and often directly opposed good and tasteful designs, leading to many "confrontations", all resolved in the interests of the festival.

There are good answers to all of Holden's questions, answers that any one of us would have been happy to give, if asked. Perhaps future critics would care to delve a little more deeply and give courtesy to those who toiled long and hard, in circumstances known only by those who were there.

Francis Collett
Newcastle-under-Lyme
Staffordshire

Fear of approval

From Bob Hewitt, president, Institute of Clerks of Works
I READ with interest comments by John Newlove, (September 12) regarding JCT 80—Clause 12 and the clerk of works.

As president and chairman of a working party that is reviewing the role of the clerk of works, I am aware of many actions that take place not in accordance with the present forms of contract.

As a practising clerk of works, I cannot understand, if those who work in the industry are providing works to specification and good practice, what it is they have to fear from an approval process that could save time and money in the building industry.

Bob Hewitt
London W5

From J Ford
I ENCLOSE copies of 33 advertisements placed in your paper by your paper by the RIBA appointments bureau.

There have been endless debates on how many architects are needed and how many departments of architecture must close, both in polytechnics and universities.

Why does the RIBA publish these advertisements? For if they mean what they say, the lack of powerful RIBA support to its educational system is scandalous.

J Ford
Nottingham

Long-lost winners

From David Pressley, public relations manager, Crown Point
LAST year we completed our 40th annual conference for students of architecture and interior design. Before 1975 these were known as Walpamur Prize conferences, since when they have developed as the Crown Prize to offer students a travel scholarship worth £2,000.

While planning this year's conference and the regional colour lectures and exhibitions, it was suggested that we endeavour to trace former Walpamur and Crown Prize winners with the intention of possibly organ-

ising several reunion dinners. We shall be delighted to be these prizes. A business with the year of conference attendance will be sufficient, this single.

David Pressley
PO Box 37
Crown House
Tollins Road
Dunston
Lincolnshire

South Africa boycott

From Jennifer Jones, London
I WAS delighted to read news of the new organisation, UK Architects Against Apartheid, and that one of its suggestions is that we should avoid using South African products.

I suggest that a list of products be published in which those architects who wish to avoid using South African products know which ones to specify.

Jennifer Jones
London N2

RIBA spurns students

From B Spencer, chairman, School of Architecture Association
I NOTE your report (September 19) that the Cudat visit to R may face a boycott from students of the school of architecture. Throughout the visit, the students have been approached by the RIBA. Just as the RIBA has asked that the Drypool community hall would invite Cudat, so RIBA have assumed that students would do their work. Cudat may indeed find it difficult to persuade students from the school to co-operate with them in this exercise.

B Spencer
tull

Underground solution

From Peter Southgate
ARTHUR Quarmby (October 3) is absolutely right. It is becoming increasingly obvious that the only way to deal with the great space gobblers of the 20th century—shopping centres, robot factories, educational leisure facilities, warehouses, power storage and general (to mention but a few)—is to put them underground.

The surface of the Earth can be preserved for the amenity and enjoyment of future generations. Undergrounding has enormous practical advantages: well—virtually nil or at best very low running costs, good security, and not least, the great benefit to an already much-overburdened profession of providing a structure that is very well protected against those natural enemies—buildings, thermal movements, frost damage and solar radiation.

Quarmby is right to consider David Higdon (September 19) because far from destroying the green belt, an underground shopping city would benefit it by allowing the beautiful adjacent Epping Forest to be extended right over it. In fact, the development could be the classic prototype of the cater for the late 20th century on an overcrowded island which can ill afford to lose any more land to the traditional suburban sprawl of the surface of the Earth under an ocean of green.

Peter Southgate
Dolwyddelan
Gwynedd

All the fascism of the fair

From H I Meyer
SPOILED for choice, I did not know whether to rejoice with Henry Law and his reasoned argument for the single tax, or react violently to Geoffrey Broadbent's apologetic pro-classica sua (September 26).

But the thought occurred to me to turn to the classic encounter between Daniel H Burnham and Frank Lloyd Wright back there in Chicago almost 92 years ago, when Uncle Dan took to the mountain and showed him all the glories of the world, saying: "Beautiful... all beautiful! I can see all America constructed along the lines of the fair, in noble dignified classic style. The great men of the day all feel that way about it—all of them."

Wright could have had it all, every bit of it. John Root, Burnham's designing partner, had just died. Burnham needed a talented and energetic designer to "make no little plans". But as is history, Burnham was turned down.

But as Wright knew and spent a lifetime demonstrating, to spurn Classical architecture does not mean to embrace stylistic dogmatic "modern" styles. Fascism is not the fun, but the funeral of the fair, and fascism is used to using Classicism whether it is the Beaux Art version of the Chicago World's Fair or the sub-topian stripped down arches and endless vistas of Mussolini's Terza Roma and the multi-national modulator of Le Corbusier, or the rigid soullessness of a Miesian stump and the post-modern posturings of Venturi, Krier and Stirling.

The architecture of Frank Lloyd Wright, Unsonian architecture, Broadacre City architecture, organic architecture, is the third way, the alternative style, the true path of design. Abe Hayem and Broadbent have set up on two sides politically, establishment and anti-establishment. Right versus Left, but architecture is not all that. Architecture is about giving a form to the local habitation of society. If that society is unjust its architecture must be Classical, whether stripped-down Corb, functional jolly-Rogers, or quivering Torry.

Only when the society changes to acknowledge the fundamental laws of an organic political economy will organic architecture, the American dream, and true beauty be built. Until that time, when democracy triumphs and rid itself of the rotten economic system which is spawning freedoms, all our architecture will remain Classical and fascist. Broadbent is right not to castigate German because it was the language of Hitler. Fascism was not Hitler's achievement alone. Fascism grows out of a rotten democracy, and the rottenness of that democracy is the natural consequence of economic conditions.

Conditions which prevail wherever there is private appropriation of land rental values. Every country is potentially a fascist country. Germany and Italy were but the Jungian archetype—the archetypes for a development which no country can escape except by the establishment of the equal right to all to the occupation and use of the land. The private appropriation of the rent of land is the deadly enemy of mankind. If we want a truly organic architecture we must, as in all building, first clear the land. Until then the battle of the styles will rage

along with the struggle for life, which should instead be the pursuit of happiness.

H I Meyer
London SW6

Monetary madness

From Eric De Maré
HENRY Law is wrong (September 26). If scientific price adjustments were made by paying retailers with new state credits so that goods could be sold below cost prices, the purchasing power of the public would be increased, prices would fall and inflation would be prevented.

"Coupons for soap powder" may be, and why not? Money is coupons—or should be. It should not be regarded, as it is now, as being in itself a commodity—like soap. It is an abstraction and, when not abused, one of the most useful inventions of humanity.

But now it is being abused, for humanity is being kept short of purchasing power by the debt system (and by the ethic of toil on which it is based). How then can the taxing of land help the economy? How can any taxes help? Of course, governments need revenue to pay for social services (including those heavily and expensive weapons which, for one, don't want), but they don't have to raise that revenue in taxes.

With a few taps on a typewriter they could create sufficient money coupons out of nothing, to use as revenue which would be based on the plethora of physical realities. What is physically possible must be financially possible, and we possess a huge unearned increment of physical realities on which to draw and which is not yet represented by monetary symbols.

Money isn't wealth and industry doesn't create it. If banks can create credits out of nothing, so can governments—and without charging themselves (or us) huge interest and without piling up false and astronomical debts. (The first charge in every budget is payment of interest on the national debt, most of which has no right to exist; the fact is never mentioned by the media. In 1984 the interest was nearly £12,000 million, and it is rising rapidly. About a third of all local rates we pay goes to interest on false indebtedness, but that is never mentioned either.)

The situation is complicated. I've written a comprehensive book about it which, though obviously he did not read it, was revised by your critic. You can't print it all on your Letters page but I must add that history and religion have helped to cause our monetary madness, not least the old biblical precept of rewards and punishments. So the purpose of a social economy is not regarded in general as a simple matter of producing and distributing wealth for the benefit of the individual but as a means of expiation for unknown, original sins. Are we all guilty by guilt? Puritannism has much to answer for—not least our ghastly "urbanoid mish-mash", where, to quote G M Hopkins, poet: "Generations have trod, have trod have trod; And all is seared with trade, bleared, smeared with toil."

Eric De Maré
Cirencester
Glos

Bathtime creations

From David Maygar
IT seems a pity that so much can be written about architecture and so little of it have any meaning. The latest example which comes to mind is E M Farrelly's article in August's *Architectural Review* entitled "The new spirit".

The piece represents the nadir of contemporary architectural thought and criticism. Farrelly has made little or no attempt to be truly analytical and frankly tells us nothing about architecture today in what might be called real terms. What we are sold is the latest reactionary nonsense thought up in the bath.

It would surely have been more informative if Farrelly had discussed the current architectural situation in the context of ideological developments and looked at hard material facts—the social, political and economic trends which have affected the profession and the construction industry. Instead he articles proceeds on the basis of the

ideal notion that the history of architecture is about changing styles—spirits of the age which are manifested in the buildings of a particular time. Architecture becomes self-determining and no worldly things can effect its change. It may be fun and interesting to discuss architecture in terms of "zeitgeist", but it represents a critical tread-water.

But above all, what was most disturbing about Farrelly's editorial was the political veneer applied to her writing. I say "veneer" because the politics became a trendy adjunct to what she wrote rather than bearing any relationship to her discussion about architecture. Essentially we were left with a description of buildings in visual terms—form separated from social content.

This is surely what we all hope to avoid—a too great preoccupation with what a building looks like.

Post-modernism as an "ism" may certainly have died, but as an ideology it lives on and it will live on until we have radical social change. Call it the new spirit, but the only "new" thing about it is the name. The label is

as superficial as the architecture and its apologists.
David Maygar
London NW6

Options outstanding

From Alan Wood, housing development committee, Camden Council
I WAS astounded to read in your magazine that the council "has agreed to appoint outside consultants to determine the future of its Hillview Estate" and that the option of demolition "has now been dropped".

No such decisions have been made. The current options are redevelopment and rehabilitation. We will be seeking professional advice to determine whether or not there is a realistic option which combines the two. When we have this information we will be appointing an independent agency to carry out a consultation exercise. The final decision will then be taken by the housing development committee.

Alan Wood
London NW1

Acting on damage

From K Liddemore, litigation manager, City of Bradford Metropolitan Council
I WAS interested to read the article by Neil Jones (September 5). It was, however, perhaps unfortunate that the article was published on this date in view of the fact that the Latent Damage Act 1986 was established shortly thereafter. This act does provide for a "longstop" as discussed by Jones. The Act provides, however, that no action shall be brought after the expiration of 15 years from the date on which there occurred any act or omission which is alleged to constitute negligence and to which the damages are claimed, is alleged to be attributable. While the decision which was the subject of Jones' article appeared wrongly to extend the time upon which a breach of duty may be committed, the Act appears to remedy the situation nicely.

K Liddemore
Bradford

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Easichack series — how to become a Jack of all trades

Henry Haverstock introduces a new year-long series dealing with all aspects of supervising the building trade.

BUILDING designers must supervise skills they do not themselves possess.

Not many architects are competent plasterers, sealant applicators or masons. Nor many can operate an excavator or a power front — but work in any one of these trades may have to be rejected by the supervising officer if it is not up to scratch.

For the next year Henry will

be looking at each trade in turn to find what level of performance it is reasonable to expect. Also when (in what circumstances) it is reasonable to expect craftsmen to exercise their skills. It is often not the tradesman's fault that the work is poor. If he must work off a ladder, in the rain, within a time limit, with second-rate or inappropriate materials, over-hand, single-handed, exposed to

fumes, without adequate instructions and underpaid... then the result may be "less than satisfactory".

Each trade has its own secrets. Sometimes it may be a knack or an acquired skill, the level of which is dependent on the aptitude of the apprentice. Sometimes it may be a technique requiring special equipment which allows a job to be done in a way that would be impossible

without the equipment. The tradesman may also depend on the quality of the materials, on the accuracy of setting out, on his tools and often simply on hard graft.

Henry will be discussing how to recognise the good craftsmen. He will also be looking at the work of the villains who cover up bad work and at the pretences and malpractices that give the superficial appearance of good

work without the substance of a proper job (when, for example, the paint is over-thinned and the frost-damaged brickwork is rendered over).

If a donkey jacket is found in a wall cavity, or a roofspace is filled with cavity foam insulation, or the old asphalt goes back into the melting pot — then you will know a real villain is involved.

But more often it is a petty crime such as a squirt of washing-up liquid to fatten the mortar of a screw held in by wood glue.

Broadly the series of weekly articles will be concerned with how to get a good job in each of the 20 or so trades to be covered. The specification, the supervision and the site management each play a part. The articles will cover:

The material that the craftsman needs.
The tools and equipment.
His (or her) skills and training.

It is well known that specifications and manufacturers' instructions are not always read — and if they were it is doubtful whether they could cover all the potential flaws in craftsmanship that can mar a job.

There is a reluctance to supervise work not only by architects, who are at pains to point out that they do not make "frequent or constant" inspections, but also by the contractors' agents who often try to lure the architect into premature signing to lighten their own administrative burden.

Even where a clerk of works is employed for frequent or constant supervision there is rarely any detailed and comprehensive

instruction given to him as to what he should check and the level of craftsmanship he requires.

Site management is increasingly in the hands of managers who have no background. They are chosen for their skills at shooting rather than for their ability to avoid trouble.

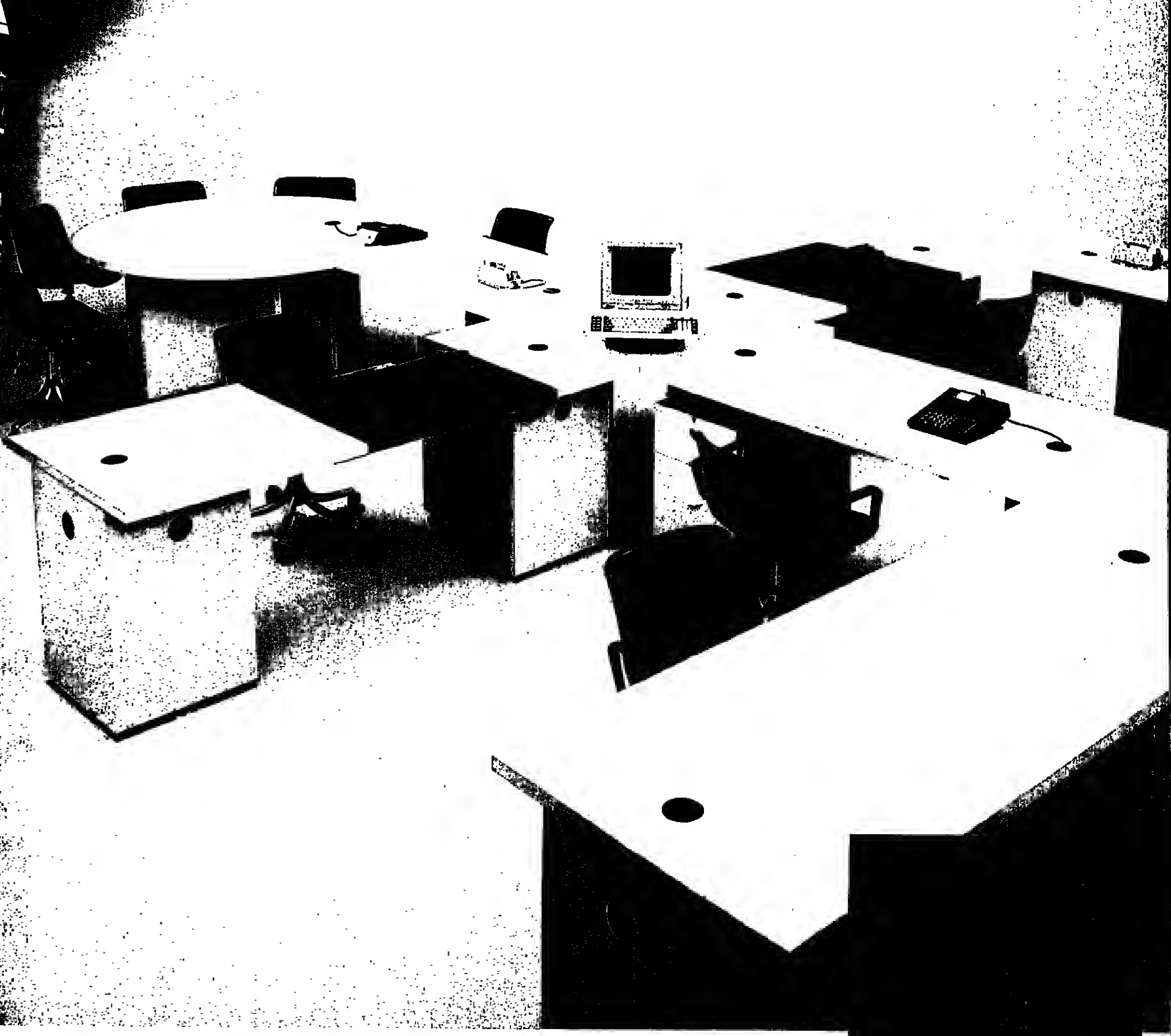
Their training may recognise the difficulties they will have dealing with the craftsmen.

A few courses now in practical site work to managers a feel for some trades they will be called to manage.

However, on actual counts they need more than a superficial feel for the trade. They need the hiring and firing, the rates, providing access, protection and allocating particular craftsmen to particular jobs.

With so much work subcontracted there is a increasing tendency to refer supervising officer or clerk of works directly to the subcontractor — whether the contract is nominally or not.

Henry's pages will be concerned with work on bricklaying, joinery etc, but with newer crafts — the engineer and the ceiling fitter. If over the next year readers come across aspects of good (or bad) craftsmanship that should be passed on, Henry would be grateful for the tip. His hotline is 01-767676.



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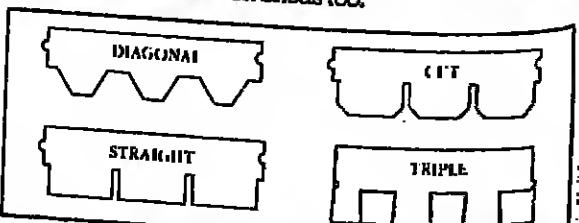
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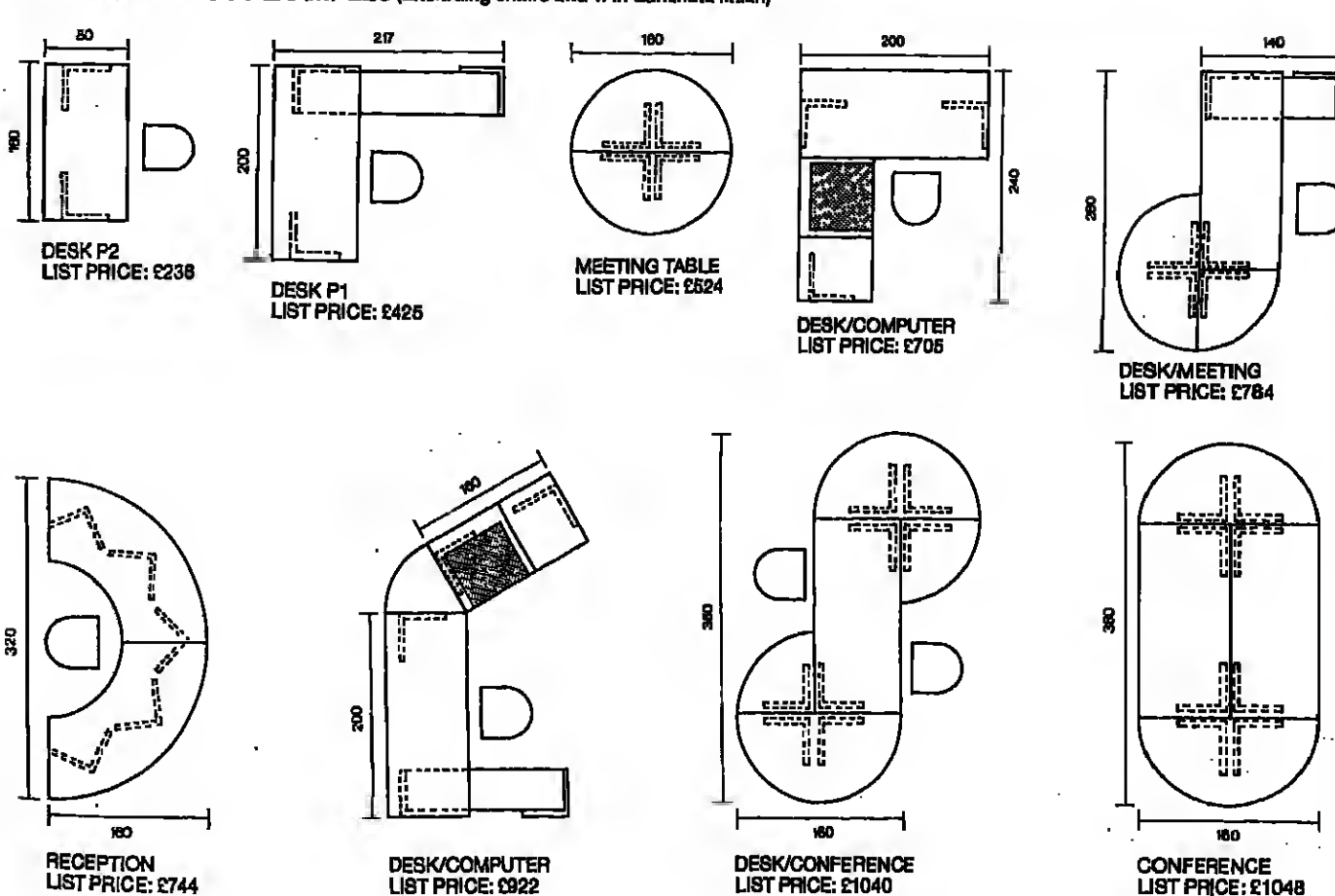


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"THAT'S the Congo that's Nottingham... that's Havana... that's Berkhamstead..." Paul Hogarth was showing me some of the illustrations from his new book. In case you can't imagine what theme could possibly link these locations, it's a bookful of pictures of Graham Greene settings, called *Graham Greene country*, by Paul Hogarth and Graham Greene (Pavilion Books, £17.95).

Hogarth is nearly 69. Bearded, and quietly spoken, he looks upon himself as an artist-reporter, and admires those who in Victorian times sent back visual dispatches from the furthest-flung corners of the empire to be published in the *Illustrated London News*, in the process helping to develop the strong English tradition of illustration.

Greene, equally, could merit the title of a novelist-reporter. He spent some time working as a journalist, and even now claims not to create from his imagination — only to describe. The fact that all his settings are based on

A JOURNEY TO GREENELAND

Tim Ostler talks to artist-reporter Paul Hogarth who travelled 50,000 miles to track down and paint settings of Graham Greene novels. The results have just been published.

real locations meant Hogarth was able to illustrate the novels from life.

Hogarth has had a long association with Greene, having for more than 20 years provided the illustrations on the cover of Greene's Penguin editions. But until this project the two had never met. On their first meeting, Hogarth produced a selection of the Latin-American and Caribbean work he had produced for the book. Greene, it seems, was impressed. He became fascinated with the project, enthusiastically contributing the essential information about the identity and whereabouts of locations. Southcra, for instance, where the final

scene of *The confidential agent* takes place, is in reality Clacton-on-Sea.

Hogarth has also had a long association with architecture. For architects, perhaps his most famous book is *Drawing architecture*. But Brian Hatton once described him, aptly enough, as an artist of architectural features, not details. The particular aspects of architecture that seem to interest him are those that would catch the eye of an author, not an architect. For this reason, he is not, like Ben Johnson, an architect's artist.

"I see architecture as an image which evokes a sentiment — as a symbol," he says. "That doesn't mean to say that I don't appreciate

the finer points of architecture — I do. But I do use it as background for some kind of social comment."

The buildings he likes to draw and paint are objects about which atmosphere has accumulated over a period of time. "I began on early travels to central and Eastern Europe," he explained. "where for the first time I saw the great cathedrals and palaces. I'm very sensitive to the backwash of history — and I'm very affected by architecture that reflects history."

Hogarth has in the past described himself as a "topographical and satirical illustrator" — two concepts that are not generally associated with

each other. What exactly does he mean?

"I'm interested in the social aspect of architecture," he says. "and I use buildings as symbols against which various things happen." Buildings inexorably record the traces of their builders and occupiers, and perhaps in this way topographical portraiture comes closest to social comment. A portrait of a person can only record one personality. A portrait of a place, because it is formed by an accumulation of personal and social events, has the potential to express the character of that society.

He referred to a series of watercolours describing the background to *The power and the glory*, pointing to a drawing of the gateway to a Mexican cemetery, which bore the legend "Silencio". "This does feature in the novel. It's no longer classical, as it was described in the book. It was rebuilt: but it's equally forbidding."

Following his travels to Eastern Europe, in the mid-50s Hogarth held an exhibition at the Architectural Association, called "Buildings and People". His work at that time was closely bound up with the theme of the post-war reconstruction of Europe. The "people" in the title referred to those who were engaged in carrying this out.

Today, by contrast, Hogarth's focus has shifted from the activity of construction to the more passive process of decay. In one sense, a building shrouded with scaffolding could be said to be as sketchy and picturesque as a ruin. But there seems more to it than that. I asked him if he agreed that his inordinate interest in the decadent and the crumbling was equivalent to Greene's preoccupation with the whisky priest rather than the brisk than the national hero.

"Yes, the flawed," said Hogarth, laughing as if in confirmation, with that sudden wheezy heartiness. "I must say I felt completely at home with this kind of subject. I'm very fond of the decay. It must have substance: it must have character."

"Greene and I are both travellers, with a background in journalism. I think that's the connection. We have the wanderlust, with a compulsion to see

places — to see all places not very good at all. England. Foreign countries offer me a wider range of matter, and I visualise the buildings I would draw in Cuba, Sicily and Vienna."

The pictures in *Graham Greene country* are of where, in his own words, "I have happened and not happen." As an example, Hogarth gestured towards a drawing of what looked like a real shack in Sierra Leone, the book, *The heart of the matter*, melancholy and the book, it serves as a symbol of his own decline, out-nerved by another petty bourgeois European quarter. Hogarth is a more positive light. It is a very satisfying drawing in its own right — but also as a symbol of a colonial era which has disappeared.

This era offers rich material for the novelist — all extensions, the illustration because of the classes of it generated and the political frailty of many of the minor positions of power. Hogarth's extensive had to be completed in the of a year. After visiting country in his itinerary returned to Britain to do work and change his way of work.

Chief among the difficulties Hogarth had to face while working was being mobbed by locals while he was up work. "I remember I was drawing a mosque, and this group of black men clamouring up a drain simply to ask me if they could put in for a British Government scholarship." That we laugh breaks out again. "I were schoolboys from one of the schools that have been in English times, with blazers and caps. They knew what they were asking for — one of a wanted to be a graphic designer."

Undoubtedly one of the people look at the work of painters in public is to see the artist's view of a scene through their own. And perhaps same could be said of the people who are likely to buy their work. Why do we like to look at

Illustration from *Our man in Havana*.

illustrations if not to compare the illustrator's image with the one we have built up in our own mind?

Graham Greene country has been far and away Hogarth's biggest project so far. It involved visiting 50 cities in 20 countries across four continents — and overcoming innumerable practical problems in each location. "I could never have pulled it off at any time before," he said, "because it needed a tremendous amount of experience to

get the drawings done in the right way at the right time. "It's an assignment that has called for a great deal of tact and diplomacy, as well as stamina — and the ability to get a drawing done under any circumstances."

To an illustrator of Hogarth's experience, skills such as being able to paint a watercolour in the pouring rain are taken for granted. "That's the journalist's background — a resource which I don't believe the average artist has. You've got to be deter-

mined to get your material. I'll go into someone's bedroom if it has the right view."

What proved more tricky was dealing with officialdom. "In Zaire they wouldn't give me permission to draw the Congo River — which I did anyway. I could have been arrested. And of course if they put you in jail, you have to prove your innocence — and it's a hell of a job. But luckily, in Zaire, most of my drawings were done in a loper colony."

Mosque, Freetown, from *The heart of the matter*.

The book Hogarth was illustrating at the time was *A burn in the case*, Greene's story of a successful architect who loses his faith and retreats to work in a hospital in the then Belgian Congo. The story culminates in the design and construction of a new ward block. It is reputedly based on a true story, and Hogarth found the very building in question, designed in a sort of colonial art deco.

Did he ever draw a complete blank? "I nearly did in Corri-

entes, northern Argentina, which was the location for *The human factor*. Then I met, quite by accident, a British emigrant whose uncle was a fan of Greene's, and knew all the places that Greene had visited. Once a price for Hogarth was the architectural quality of one place not normally considered particularly exotic. "Nottingham was just as interesting as Havana or Haiti," he said, going on to enthuse about Walter Fortherrill, architect of many

buildings there — including offices where Greene worked as a journalist.

Except for a cor trip round Spain with his son to illustrate *Monsieur Quixote*, every one of the 50,000 miles Hogarth travelled had to be covered on his own. "It was a lonely business," he confessed. "But Greene agrees: one has to travel alone, to savour every moment. You've just got to go all out, all the hours that you are there. It's hell while it lasts."

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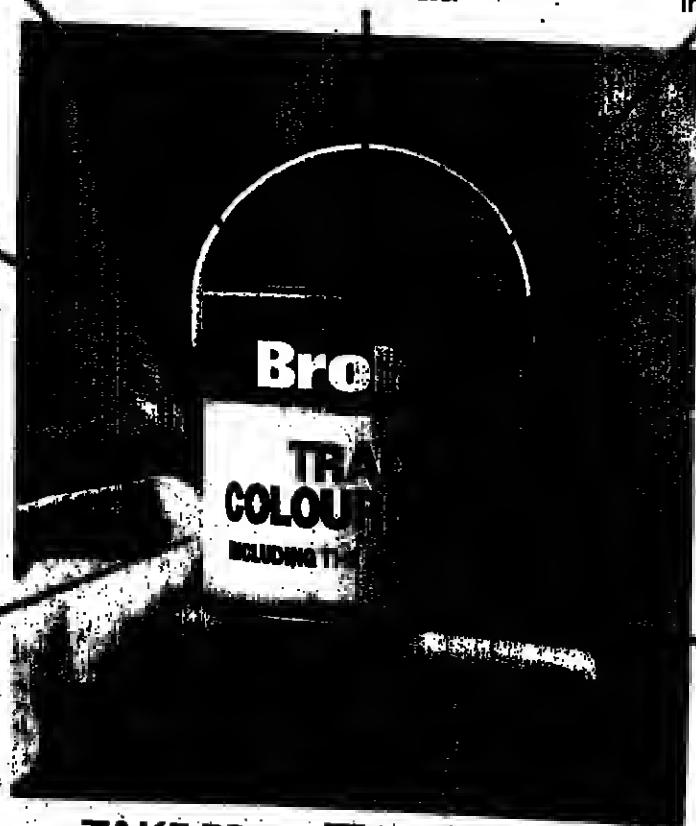
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ART OF THE STATE

Judi Loach examines the political will behind architectural projects in France and details the major schemes in progress throughout the country.

EVENTS preceding the recent elections in France confirmed that the socialist administration there has been using architecture for political ends.

First there was the exhibition of "Grands projets (major state projects)" staged in the Centre Pompidou from early February. Supposedly covering the principal architectural projects sponsored by the state during the 10 years leading up to the

bicentenary of the revolution (1879-89), it actually omitted any comment on the only such building erected before the socialist regime, the Centre Pompidou itself, the opening of which began that decade.

Instead, the host building was simply labelled "the first major international amenity in the capital since the turn of the century". The organisers (rightly) claim that the projects displayed are continuing the change in the "architectural and

urban physiognomy of Paris" which it began. The exhibition confined itself to 10 projects: the Orsay Museum; the Grand Louvre; the International Centre for Communication at Tate-Défense; the Arab World Institute; the Opéra Populaire at the Bastille; the National Museum of Science and Industry; the Cité de la Ville; and the new Ministry of Finance.

This exhibition seemed to be designed expressly for the Parisian market — the voters who had already elected Chirac, as mayor — since it excluded any mention of the government's provincial projects. This was unfortunate, at least from an architectural point of view, because this latter category includes the most promising schemes — the School of Dance at Marseilles by Roland Simounet, highly acclaimed for the new Picasso Museum; the magnificent transformation of two fairly nondescript factories into the Cartoon-Strip Museum at Angoulême by Roland Castro; and the exciting conversion and extension of the Motte-Basent cotton mills at Roubaix by Alain Sarfati.

The exhibition, in this Parisian context, surprisingly neglected the scheme on the Montagne Ste Genevieve and the refurbishment of four major museums in the city (the Natural History Museum, the Ethnological Museum, the Palace of Discovery and the National Technical Museum), although these had been added to the official list of Grands projets before the exhibition was organised. This only reinforces suspicion of the essentially rhetorical intention behind presenting 10 projects from this decade.

Secondly, there was the dramatic performance on March 13 in which the president opened the first of the Grands projets to be completed, the new science museum — the "City of Sciences and Industry" — at La Villette. The museum was, however, nowhere near finished by this date and the celebration, attended by tens of thousands of invited guests, bore little resemblance to an opening. It was more of a festival to mark the simultaneously sighting of Halley's Comet and the satellite Gioia — which explains the timing of the event, 11pm to 2am!

Public reaction to such an overtly political use of architecture can be deduced from entries in the visitors' book at the Centre Pompidou exhibition. People seem to welcome this state, although perhaps because it is perceived in terms of cultural amenities rather than of architecture.

If any single project remains dubious in the eyes of the man in the street it is no longer I M Pei's pyramid "despoiling" the Louvre, despite the strength of the initial protest against it (which, one now suspects, was led mainly by aesthetes), but the Opéra Populaire at the Bastille. Large number of people

representing a broad cross-section of society visited this site. Furthermore, Chirac, as mayor with a fair percentage of the vote, has obvious reasons for hothousing to sit through the development of almost hour-long video which the architects to city, a fact which Mitterrand (in their own projects) seems to have exploited with the development of the Grands projets.

Grands projets, *Le Mitterrand* by François (an employee of the financed Institut d'Architecture), has hit the best-seller list with the major chains of booksellers unable to keep up public demand for it. Such public interest in architecture may seem strange in France, both the policies of Giscard d'Estaing and his "Loi sur l'Architecture" and "1,000 Locaux d'Architecture", which led to bringing architecture planning into the arena.

Mitterrand built on foundations; the social programme of Grands projets Paris and, later in the are proof enough of this. There has also been been a Centre Pompidou exhibitions of many projects. The fact that members of the public have to criticise the Pompidou (primarily for its models) may well be due to familiarity with architecture through these exhibitions, of which have focused on some models.

But what effect is the of government likely to be these Grands projets? answer — again perhaps what surprising to find that it will probably be drastic, even though the government is coming severe cuts in public expenditure. True, one of the victims of such cuts is Carrefour International Communication, which longer to be used for the for which it was designed this might save the administration from the embarrassment that such a tourous (some would say delicate) project was bringing them; and in any building itself will be completed somewhat later than originally envisaged.

Otherwise the Orsay have only been subject to relatively minor cuts, the impact of which will be restricted to deferring the completion dates. The Orsay had taken great care to that virtually all the projects were two or three years advanced at the time of the elections for the change of government. The last opening date given was late 1988. For the latest information ring Youssef Baccouche, 45-38-52-53.

The Arab World Institute, Quai St Bernard, Metro: Jussieu. The building (by the young socialist favourite, Jean Nouvel) is now nearing completion, and should be open to the public early next year. There is no explanatory exhibition. For the latest information ring Alain Sarfati, 45-38-52-53.

The first section of the park (10 hectares out of the total 35) is also open. The development of La Villette (and its history) is explained on information panels scattered throughout the park and in free brochures in the museum or from a temporary building by the Porte de Pantin entrance to the park; the latter also contains a large-scale model of Christian de Portzamparc's scheme for the

latest information ring Alain Sarfati, 45-38-52-53. The new Ministry of Finance at Bercy, Metro: Bercy, Quai de la Rapée, Quai de la Gare, Gare de Lyon. Some of the associated buildings (mainly housing stock to replace that lost in clearing the site for the ministry building itself) will be finished this summer; work has also begun on the main buildings, whose completion is not due before summer 1988. There is an explanatory exhibition at 16 quai de la Rapée, Bercy. Open Monday-Friday, 10am-7pm and Saturday, 9am-1pm. For latest details ring Brigitte Barcelon, 42-97-23-82. The Opéra Populaire at the Bastille, Place de la Bastille/rue de Lyon, Metro: Bastille. Work is under way on site; the opera is due to open for the 1989-90 season. For further information ring Agnès Dépigny, 48-07-15-20.

La Villette For the Museum of Science and Technology (including the Géode, the hemispherical cinema) the nearest Metro is Porte de La Villette, but for the Grande Halle the nearest metro is Porte de Pantin; the Zenith (the hall for pop concerts) lies midway between the two, in the middle of the park which envelops all the developments at La Villette.

Although the official opening of the museum took place in spring, some sections did not open until late summer; entrance to the building itself is free, but a charge is made for entry into certain (permanent) exhibitions within it. The Géode is proving particularly popular (don't be put off by the queues to the museum itself — one never has to wait more than 20 minutes to get in, and once inside there's plenty of space for everyone). As tickets for the hourly cinema shows can only be bought on the day, it is advisable to arrive several hours in advance to secure them (one can visit the museum and park while waiting) and to avoid weekends if at all possible. The museum is open from 2pm to 10pm (closed on Mondays). Some of the information offices in the entrance hall speak English, and can be identified by their special badges. It is possible to hire headphones (in the entrance hall and also on the first floor) for the English translation of the audio-visuals, and the commentary in the Planetarium.

Concerts are held from time to time in the Zenith (usually at weekends) and even in the Grande Halle (which is primarily intended for temporary exhibitions).

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City of Music, to be built at this end of the park. The opening was scheduled for late 1988, but will probably be delayed in the wake of cuts by the new government.

Montagne Ste Genevieve (conference centre, principally for promoting the new technologies, and government offices, mainly relating to research in such technologies). Park, swimming pool, etc. for the local community, and fire station/housing for firemen. Block contained by

Montagne Ste Genevieve, rue des Ecoles, rue Monge, rue du Cardinal Lemoine, rue Clovis, rue Desbordes: Metro: Cardinal Lemoine, Maubert-Mutualité. This scheme was completed some time ago. The gardens are open to the public during daylight hours.

Natural History Museum Jardin des Plantes, Metro: Monge, Jussieu, Gare d'Austerlitz, Censier. The Zoological Gallery, which has been closed for the last

25 years, is to be converted into an Evolution Museum; opening is due in 1989. Musée de l'Homme (anthropological and ethnological collections). Palais de Chaillot, Metro: Trocadero. The renovation programme here is primarily concerned with the presentation of the collections; the first stage is to be completed next year.

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Art of the state

from page 23

internal rearrangement. The Museum of Agricultural Machines, Chartres. This new museum will cover the development of agricultural machinery — the major advances in the field, and the influence of these in the economic, political and social spheres.

The museum is to be housed in a former steam-engine depot, which is being converted by Robert and Reichen. Completion is due in early 1988.

The National Contemporary Art Centre and the Museum of Contemporary Art, Grenoble. This combines two projects which have both been discussed for some time. First, there is the creation of a new home for the existing modern art collection in the Musée des Beaux-Arts at Grenoble. This is one of the finest collections of its type in provincial France, due to its curator of the 1920s, André Farcy, having been a close friend of Picasso, Matisse and the

Fauves, who donated canvases in return for a guarantee of their display, at a time when they could not yet sell their works in Paris or New York. It is housed in part of the 19th century museum/library building in the town, an arrangement which benefits neither the collection nor its setting (a building which is a fine example of its type, but inappropriate for the display of modern art).

Secondly, there is the creation of a centre for contemporary art — originally promised by Jack Lang as the place which would take art "beyond Pompidou" (works were to be passed on to other institutions when they reached 15 years of age).

This will comprise both a research centre (library and archives etc) and exhibition galleries. It is to be housed in Gustave Eiffel's Halle Bouchayer, built for the 1900 World Fair at Grenoble; the restoration of the building has been completed, and conversion is now in progress.

Projects outside Paris

The National Comic Strip Centre, Angoulême. This developed from the annual International Cartoon held in this town since 1973.

The building, a conversion and extension of two existing factory buildings, has been designed by Roland Castro and Jean Remond (the former being the architect responsible for "Galerie 89", a series of interventions in rundown suburban estates. Completion is due in autumn 1988.

The National School of Photography, Arles. This developed from the International Exhibition of Photography, held in the town since 1969.

It is the first such institution in France, and is open to overseas students as well as to French nationals.

The building, a 17th century convent, has been restored and converted by Jean Massota. It is already in use.

The Bibracte Archaeological Site. One of the most important archaeological sites in Gallia-Roman history, excavation began here at the turn of the century but has never been extended to the whole site. During the next 10 years systematic excavation will take place over the entire 135 hectares, which will then be turned into a tourist site with its own museum. The architects for this project are Caudin and Grillet. The first phase is now complete.

The National Marine Centre, Baulogne-sur-Mer. This will consist of a museum of marine life — marine flora and fauna, the fishing industry and the exploitation of marine resources — together with a research centre for the exploitation of a branch of the Science and Industry Museum at La Villette.

The building will be based on the former Casino, which is being converted and extended by J Rougère.

The National Music Conservatory, Lyons. The present premises of the music conservatory are too small and lacking in the facilities

needed for higher education in music, this institution is to move into the buildings of the former veterinary school, which is being converted. In addition a new building alongside will contain an acoustic laboratory and a public auditorium.

The architect is Pierre-André Lablanc, and completion is due in May 1987. The Lumière Institute, Lyons. The former home of the Lumière brothers, the inventors of the cinema, is a magnificent example of a bourgeois residence in the art nouveau style; for several years now it has housed the National Photographic Centre — a collection of photographs from all periods and a series of galleries for displaying (mostly modern) work. The site adjoining this has now been purchased for the development of an institute specialising in audiovisual material.

The School of Dance, Marseilles. A new School of Dance is to be established at Marseilles. It will also provide a permanent base for the Roland Petit National Ballet Company. The architectural project consists of the conversion of a former tram depot (only 10 minutes by

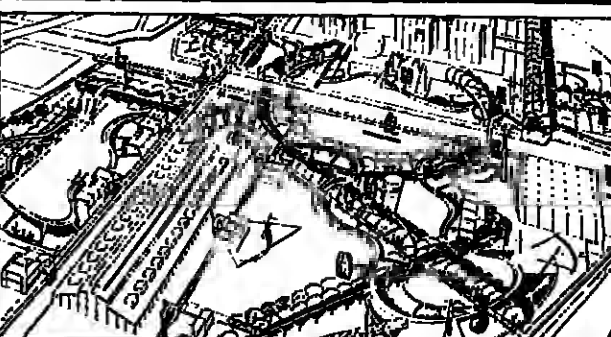
Metro from the city centre). Meanwhile, away from the hemp ropes for the activity, Tchumi's first folly is by Mondet, are being carefully constructed. by Moustakis, Oudin, a neat prairie of new grass beside the site is being landscaped, it awaits its initiation.

Similarly, the site for the new Centre, Villurbanne recently deluged by 400,000 young people attending a pop concert for SOS Racism. The new building, at present only a hole in the ground, was intended to facilitate opera on an equally popular scale. But this has become a matter of speculation as the new minister of culture, François Leotard, is determined to save as much of the planned expenditure as possible. This means that the Opera House could simply become a musical auditorium. The machinery intended to create the most efficient operatic auditorium in the world is to be scrapped along with the scenery workshops.

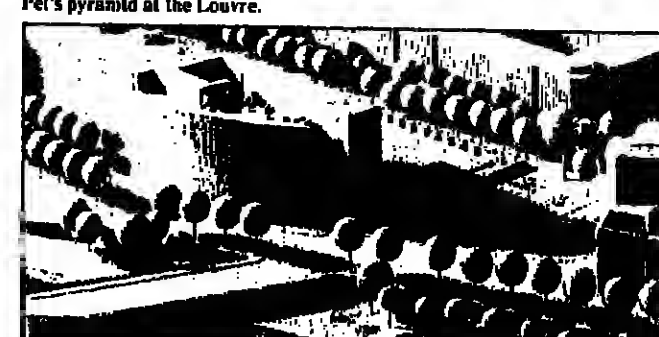
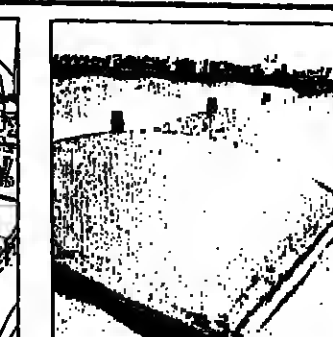
As Pierre Boulez, the French composer appointed vice-president of the project, plaintively pointed out, "to change the destiny of architecture in the process of construction, by making an opera into an auditorium, is an aberration". This controversial change in

WINDS OF CHANGE

Juliet Bidgood reports on politically-inspired changes of direction for major Parisian projects.



Gare de la Villette which houses the 20th concert hall (right).



The Arab Institute by Jean Nouvel.

direction also puts the Music City at La Villette in jeopardy. The commission for a complex containing a music school, a museum and experimental performance hall was won by Christian de Portzamparc. His office continues the scheme enthusiastically but the acoustic tests on the proposed oval performance hall, designed in consultation with Boulez, may prove to be futile. The programme may have to change in response to the denatured proposal for the Opera House.

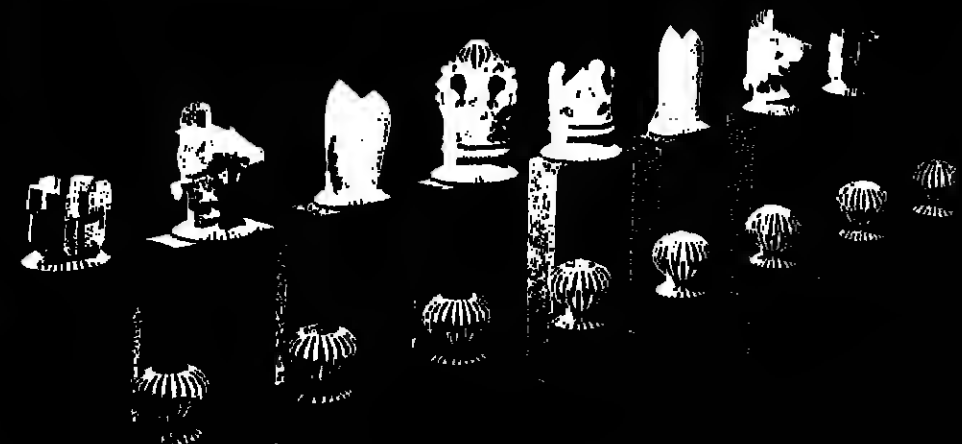
To the east, away from the cultural hub of the capital, more cranes stand over the massive concrete pillars which will support the viaduct-like structure of the new finance ministry. Its river front face looks benignly over the Seine and one may eventually come to wonder why the building is so stiff with importance, that is if the state function for which it is tailored, is unfulfilled. The ministry is moving back into the Louvre, re-erecting partitions demounted by the previous Government. It is unsure whether this

means that the Finance Ministry will not move to the less prestigious east of the city at all or wait until the building is completed in 1988. This makes the redevelopment of the Louvre, topped by Per's pyramid, a little lopsided, just at a time when public opinion was swinging in its favour. The scheme depends on the acquisition of the wing to be vacated by the ministry and also upon rapid completion.

At the other end of the city's professional axis the public facade the library is terminated

are being sold. Its destiny as an International Communications Centre erased; the side towers are already a private concern. The structure, almost at podium level, should now continue at the rate of one floor every four days. Despite the air of uncertainty one of the Grand projects will be finished untainted by the political winds of change. Jean Nouvel's Arab Institute with its envelope almost completed is full of delights. Test panels for the southern camera shutter wall are in position; behind this facade the library is terminated

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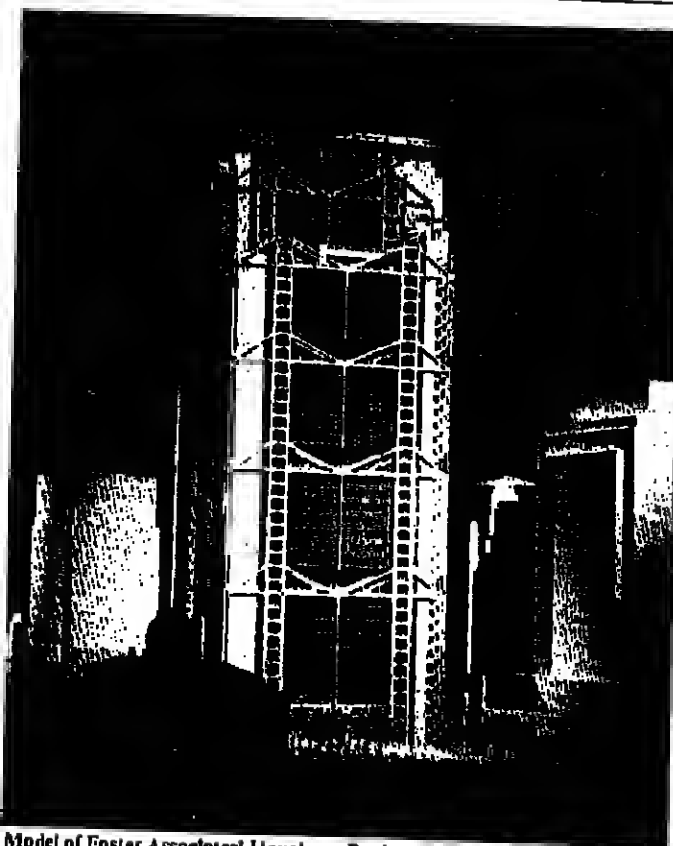
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Model of Foster Associates' Hongkong Bank with city backdrop

THE Royal Academy Show that cost £500,000, "New Architecture: Foster, Rogers, Stirling", is exhibited in the prime space at the top of the stairs with Stirling straight ahead, Rogers to the left and Foster to the right.

It was perhaps also significant on press day that Foster's exhibit was totally complete and in working order, Rogers' was incomplete but the photographic handouts handsome and plentiful, the Stirling/Wilford exhibits were having the lights tinkered with, and Quinlan Terry was in the background (an ex-Stirling assistant), disparaging the whole effort for the benefit of television cameras.

All the exhibitors are associates of the Royal Academy, but unlike other artists who are privileged to display their works, the brief asked simply for two projects from each architect, one built and one a project. This scenario gives a lack of balance, because it is difficult to obtain an overall impression of a designer's career from such a narrow spectrum. It would be like asking Elizabeth Frink to display one horse and one maquette; it is neither fair to the artist nor the public.

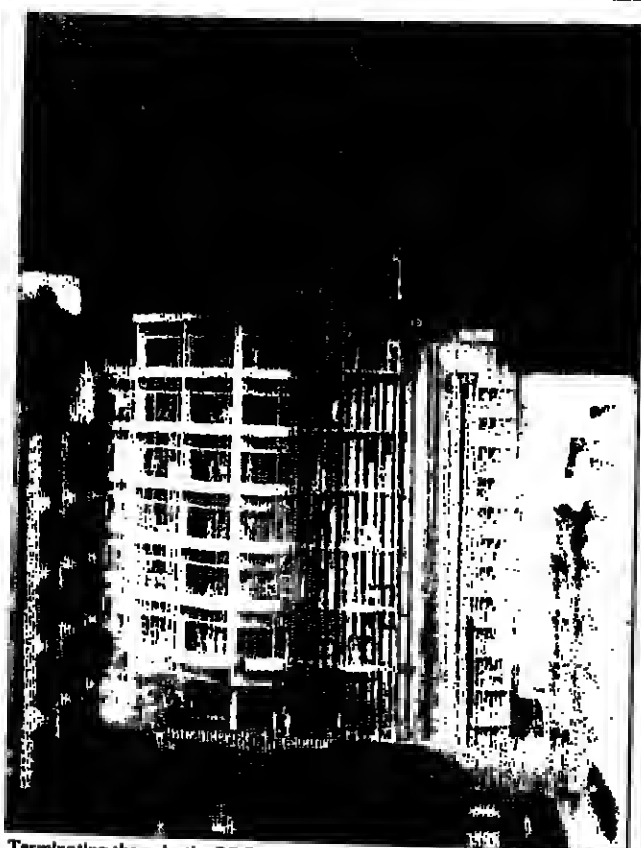
To make amends, the Royal Academy has issued a splendid educational pack for schools and there is also a well-produced book by Deyan Sudjic to coincide with the exhibition. In addition, there is the promise of lunchtime lectures on the participants, and evening events with contemporaries like Jeremy Dixon, Piers Gough and Peter Rice talking on New Architecture. Despite all this promotion, there seems to have been a history of problems with the

exhibition design in relation to the three primadonnas; the final arrangements in each area being the result of the trio going their own ways.

At that level, the highest accolade has to be given to Norman Foster, where the gallery spaces have been made to work to maximum effect. The first salon is dedicated to the Hongkong & Shanghai Bank with large-scale models and crisp drawings plus multiple presentation of slides and soundtrack, the theme setting the scene of Hong Kong as well as telling the story of one of the most ingenious buildings built in this decade. The concept of the building in the city is also demonstrated with ideas for a public space to connect the tower to the waterside.

The second salon is devoted to the unbuilt BBC headquarters in Langham Place and illustrates clearly the enormous range of talent available from the Foster team to explore design options for a demanding client. It also shows the flexibility that the best of modern design can contribute to society rather than the straitjacket of neo-Georgian favoured by other Royal Academicians.

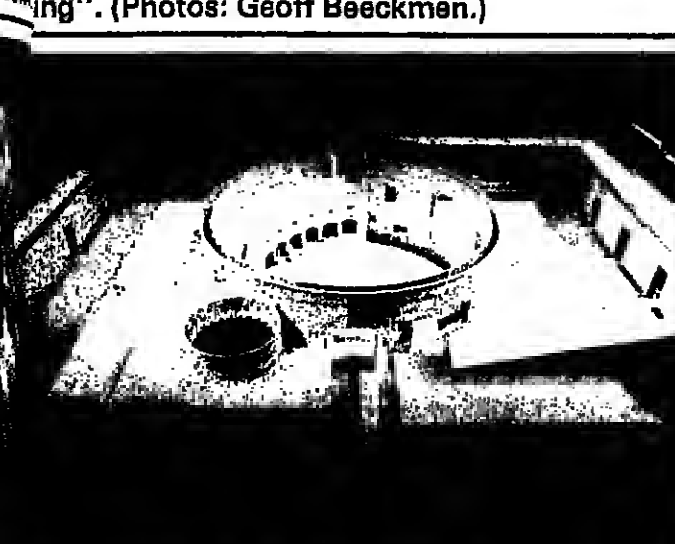
The largest gallery stands on the opposite and appropriately left-handed vista, and is occupied by the two Rogers exhibits, the main emphasis being on making a "Clity for People". The centrepiece is a shimmering lake of real water, poised dangerously at just above sitting level, which leads the eye to a reconstruction of Hungerford Bridge with railway and Embankment traffic jams swept away for a pedestrian and monorail link between the South Bank and Trafalgar Square, plus a collec-



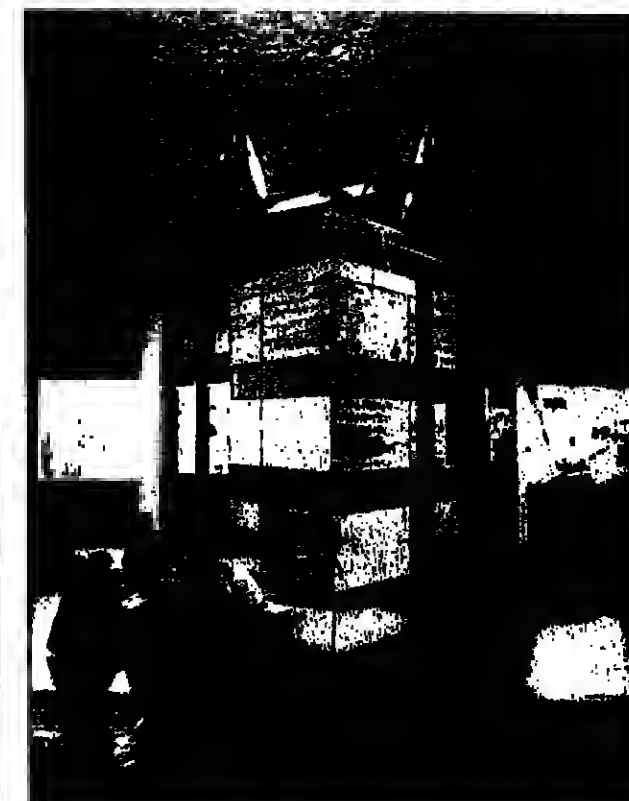
Terminating the axis; the BBC project viewed from Portland Place



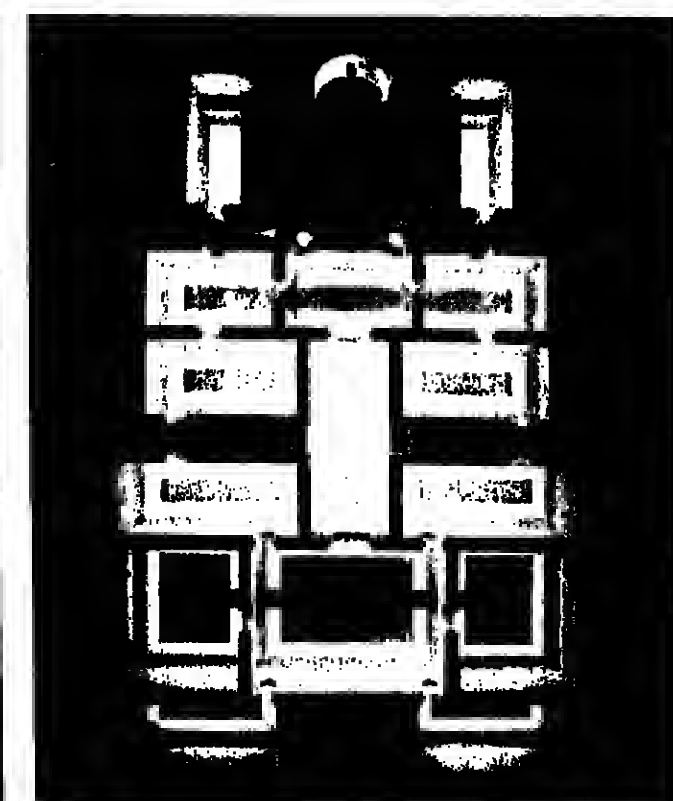
If at first you don't succeed: BIC's massing models



an explanatory model of the Stuttgart Staatsgalerie



Six tons of stone and steel from Stuttgart



National Gallery ceiling model is suspended overhead

tion of follies and restaurants which look, at first glance, like dismembered parts of Rogers' abortive National Gallery competition.

All this has been tried before by Edwin Lutyens in a Roman manner, but the attractive parts of Rogers' architecture are the lightness of the intended structures, with a pedestrian setting in some ways reminiscent of Hugh Casson's sketches for the '51 Exhibition.

Unfortunately, the technical aspects for dealing with traffic below ground are not as compe-

below ground are not as competent as the intended works above. It does seem strange that such a 21st century vision should not be accompanied by six-lane underwater tunnels for both banks instead of just a single four-lane road on the Embankment side.

The Lloyd's building is featured in the second of contributions to the cityscape, but the presentation lacks the sparkle of Foster's multiple slide presentation for the Hongkong Bank.

The most remarkable aspect of Lloyd's is that such a conservative branch of the Establishment should have given the leaders in progressive concepts and ideas the greatest platform in London with a world-class building of our own time. The qualities of workmanship and finish shine out from the pictures, the RA having organised tours for younger visitors so that the only home-built work on view can be seen in reality. What a splendid idea for public education, and for the next league of clients.

The connection between the two main protagonists of hi-tech is explained with small ponds in the common entry area. They

spell out in simple terms their early partnership (1963-67), thanks to family friends, the former Reliance Controls and the larger jobs that came as the practices grew apart. What is not explained is the way that the client, in choosing one or the other, is selecting a systematic design process, whether the budget is lavish or small. Both firms in fact are involved in product development and it was a pity that components or furniture were not used as adjuncts to the building displayed.

Mr. concluding accolade is that Lloyd's and the Hongkong Bank can truly be called "New Architecture" without reservations that I have on the third exhibitor.

The captioning at the entry states in the top line STIRLING some distance above his competitors; his raising of status, I suppose, could be attributed to age, or perhaps bulk. I had better confess that the skeleton in Stirling's cupboard, namely the History Library, Cambridge, is a worrisome feature that can never be quite forgotten when looking at the current work of Stirling and Wilford. I, like many others, was taken in by the library's geometric delights which were recorded in every detail back in 68.

The situation today is a building that has narrowly missed demolition and is in a tumbledown condition, as Lubetkin's masterpiece Highpoint One and Two came to be in the late 1940s. I make these comparisons deliberately as there is in Surling's work a considerable element of inventive geometry reminiscent of

continued page 29

GOLDEN YEARS

Alan Blanc was at the front of the Royal Academy for the opening of "New Architecture: Forward Looking". (Photos: Geoff Beeckmen.)

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Model of the revised Stirling National Gallery extension proposal



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Poster Associates' aborted BBC project from Cavendish Square

THE Hongkong Bank in many ways represents the engineer's ability to respond to challenge and also to apply innovative and imaginative technical designs to achieve its architectural ideals, particularly those of elegance and quality.

Although it has been likened to an offshore jacket structure, the design, analysis and manufacture of the bank is very much more advanced and complex. The building embodies a high degree of structural integration with services and architecture which produces a compact building of exceptional visual and material quality and efficiency of space utilisation.

There are a number of particular structural features that make this possible. The 200m high reinforced concrete masts, which are central to the concept, reduce to a minimum the obstruction of the structure to the internal planning; they allow uninterrupted movement through the main structural elements of the building at all levels.

The suspension structures allow the base of the building to be entirely open and creates a

FOSTER FRAMEWORK

Ove Arup & Partners were structural engineers on the six projects in the exhibition. *BD* asked three of the practice directors to describe their involvement, beginning with Jack Zunz.

public plaza of quality and scale. The framework comprises a minimum of components with the aim of providing large span, column-free spaces in which the services and space planning can be organised to the greatest effect.

Modular component design was introduced into the building on a scale not attempted previously in building design, the aim being to improve the installed quality of the building and to reduce the overall time of construction. Of particular note are the 140 prefabricated and precommissioned service modules, each weighing between 30 and 50 tonnes, which contained the services for the super-

structure on a floor by floor basis.

The structural concept was developed to allow the building massing to conform to Hong Kong height and shadow planning restrictions, but also to allow a future 40 per cent expansion in floor area to be realised without modification and strengthening of the main framework or foundations. The expansion would be realised by infilling the multi-level void atriums in the building and the setbacks on its east side.

The performance requirements of the structural components of the building have resulted in the application of materials and manufacturing

technology from engineering fields outside of the traditional building industry. For example, the size and thickness of the tubular within the masts involved the research and then the application of manufacturing techniques more often associated with pressure vessels. Also, the required performance characteristics of the connections in the suspension structures led to the introduction of large maintenance-free spherical bearings, normally associated with heavy mechanical engineering applications.

Although the fabrication techniques used have been applied in some advanced offshore structures, the dimensional tolerances and erection limitations have been much more restricting than for offshore structures, principally because of the transportation and erection limitations limiting the length and weight of elements. Special details had to be developed to reduce the effect of restrictions.

The prefabricated, prefabricated nature of the building components required careful control of manufacturing and construction standards to ensure the required quality was achieved in the completed building. Manufacture was generally on an assembly line basis and procurement on a large international scale; the steel framework in the UK, the cladding in the US, the service modules in Japan etc. In response to these demands, a quality assurance approach was developed for each sub-contract. An essential aspect of this approach was the extensive use of models, mock-ups and prototypes to demonstrate the acceptability of workmanship and materials.

Assurance of the engineering integrity of the design was founded on the following principles:

A commitment to a formalised analysis approach involving the use of computer techniques to enable the whole framework model to be generated and modified as required direct from a simple data base. As an extension to the technique the design checks for all members were carried out automatically and rigorously, using the data base.

Full-scale tests on instrumented prototypes of major structural components to determine stiffness and strength characteristics were carried out. The results of the testing were in

turn used as a basis for firming the accuracy and quality of the assumptions in the formal mathematical analysis of the building.

work involved prediction back-analyses of the prototype tests using large detailed element analyses in which the feature of the fabricated components was modelled.

A fundamental and comprehensive research study of wind regime of Hong Kong was commissioned. Further studies and wind tunnel

enabled a considered assessment of the local wind climate of the site to be established from which the expected (rather than statutory) wind loading, dynamic performance of the structure and environmental wind effects on the building could be determined.

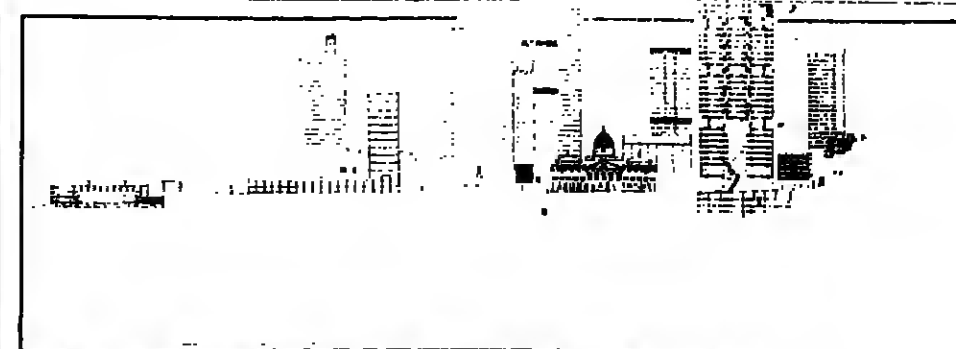
Mathematical modelling techniques were developed for the prediction of the dynamic performance of the building under the expected wind loading, from which the dominant aspects of the building response

could be identified and evaluated. Tests on the completed building are to be carried out to verify the predictions.

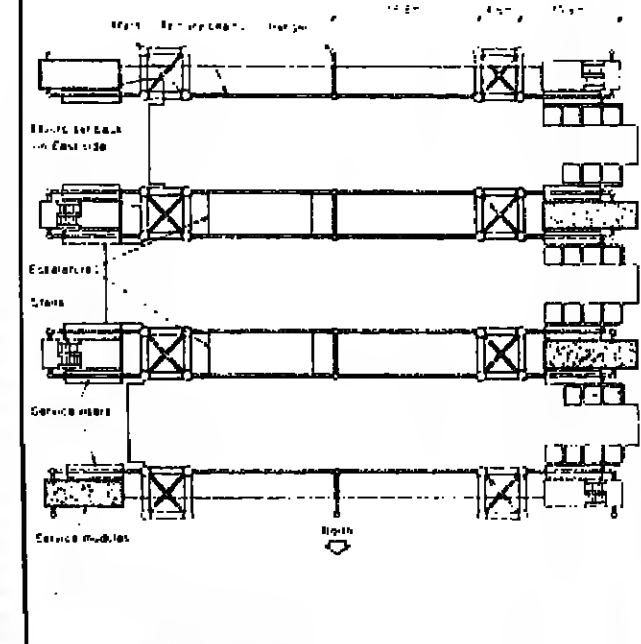
Tolerances and movements predictions are an important part of the manufacturing specification for components in any building. In the case of the Hongkong Bank, because of the eccentric mass of the building and the structural independence of each of the five building zones, the movement of individual components was particularly sensitive to construction sequencing. Simple, global allowances would have resulted in excessive and unrealistic specifications. As a result, a large effort was made to establish these movements. An approach was developed which modelled the building at each stage of construction and hence enabled predictions of cumulative building movements to be estimated for a range of construction sequences. The predictions were then used as the basis for advising on the corrective measures required at each stage.

However, in terms of engineering risk it is the substructure of the Hongkong Bank which was the most critical. From past projects, the ground conditions in this area of Hong Kong had been shown to be extremely difficult. The soil succession is fill, marine deposits and completely decomposed granite overlying granite at 40m depth. Ground water level is effectively at ground level. The substructure of the bank is a 25m deep multi-level basement with large diameter caisson foundations to granite.

De-watering and excavation in the soils above rock level were known to produce large ground



North-south section showing 6m diameter seawater tunnel blasted out some 80m below ground.



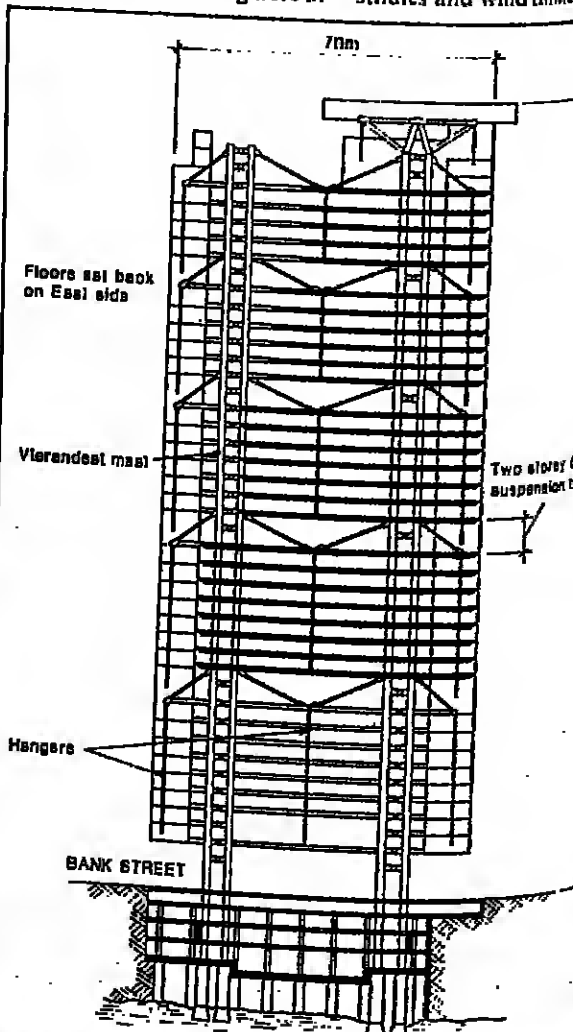
Typical superstructure floor plan.

THERE IS AN ALTERNATIVE TO BAL

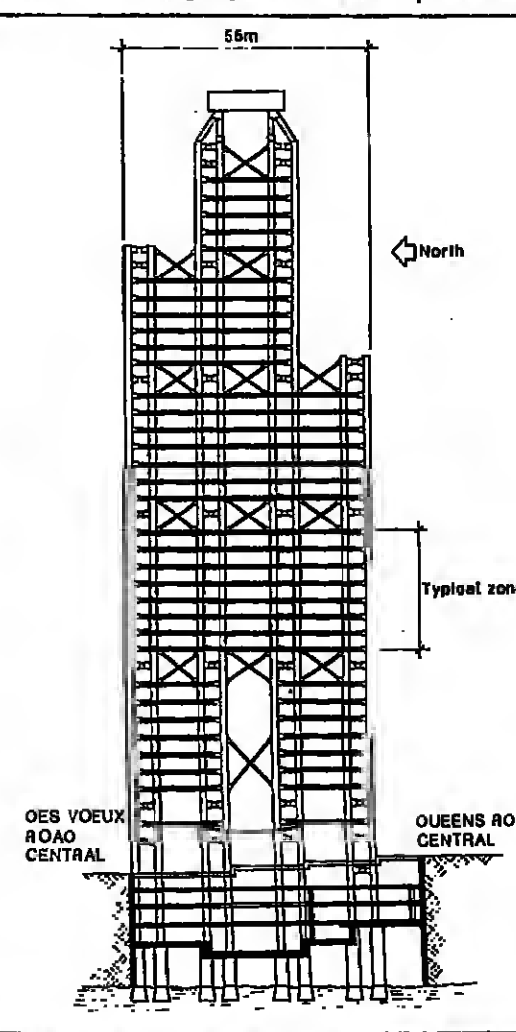


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BAL



North elevation structural diagram showing steel-framed superstructure and provides a floor area of 100,000sq metres.



West elevation structural diagram; the 47-storey building is 200m in overall height and provides a floor area of 100,000sq metres.

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Fibreglass

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ROGERS REVOLUTION

ONE of the most immediately striking features of the design of Lloyd's is the way the technical functions are expressed and used in the architecture.

For this to succeed at anything other than a superficial level the design must develop a dialogue between the architect and engineer, who cannot simply provide a technical response; he must understand the architectural objectives and take an active part in developing the concept of the building as well as the technical details.

The building consists of a rectangular block, containing an atrium, surrounded by six satellite towers and a stock of

meeting-rooms. A two-storey basement occupies the entire site. As a broad principle the main building above ground contains underwriting and office space, the satellites provide vertical circulation for people and services and the basement contains plantrooms and service activities. Some plant is on the roof and there are plantrooms on top of the satellite towers. The key engineering and architectural element is the main floor and its columns support, and how the design of this could be consistent with the subservient satellite towers.

The most important single aspect of the design is flexibility. Lloyd's have already had to redevelop twice this century

because of lack of space and the inability to adapt to changing circumstances. The need for the building to accept change underlies almost all major design decisions.

The Room occupies the whole of one floor slightly above street level, but this alone is insufficient and the atrium allows additional underwriting area to be provided, within the single space of the Room, by using gallery levels. This also permits future expansion by converting more galleries to underwriting.

Concentrating lifts, stairs, service risers and toilets into the satellite towers and supporting the main building on external columns gives an uninterrupted space within the cladding and

minimises restrictions on use. The vertical and main horizontal ventilation ducts are run externally for the same reason. The arrangement of the horizontal layers of the floor and its grid pattern minimises the disruption of internal reorganisation.

Although various parts of the design are separate in reality, the design moved forward as a whole with the focus of interest moving from area to area in a series of cycles, the development of the design in one area influencing the design in others.

Having decided on the overall shape and arrangement of the main building, the designers were faced with three main problems:

- The construction of the floor itself.
- The nature of the columns and how they supported the floors.
- The stability system.

The size and shape of the building and column positions were derived from the site area, plot ratio and choice of a 1.8m grid while the height came from planning restrictions.

- The floor is divided into horizontal zones:
 - A 1.8 x 1.8m beam grid.
 - A high-level services zone containing lighting, extract air, smoke detectors and sprinklers.
 - A steel panel which sits on stub columns at the beam intersections and acts as permanent formwork, supports acoustic panels and provides a services support grid.
- A concrete slab which is a fire barrier and supports a computer floor.
- A low-level services zone containing supply air, heat pumps, electrical power and telecommunications.
- A raised floor which incorporates air inlet grilles and floor outlet boxes for communications and power.

The ventilation scheme is to supply air from the raised floor and extract at high level through the light fitting, thus removing heat at source. The extract air is taken out to the perimeter where it is taken down through one layer of the triple-glazing before passing into the main external extract duct at the same level as the supply air for that floor. This improves the thermal performance of the cladding and makes possible the fully glazed facades which are a feature of the building. The zoning of the floor in this way is fundamental to the concept of adaptable space since it allows supply services to be rearranged with relative ease while lighting, extract and sprinklers occur in every grid.

Both the structure and services are exposed, with no false ceilings. There were particular architectural requirements for the floor structure:

- The structure should be isotropic in appearance. It was important that the floor should be seen as a ring rather than two linked rectangles which meant that the structure had to be grid rather than a beam system. This was reinforced by the need to partition offices consistently up to a beam soffit.

The beams should have parallel sides and sharp arrises so the eye would be drawn to the soffit rather than up into the coffer. In other words, it should read as a grid of beams rather than a coffered slab.

- The beams could not have joints down the centre.
- The overall depth had to be as small as possible.

The engineering requirements were:

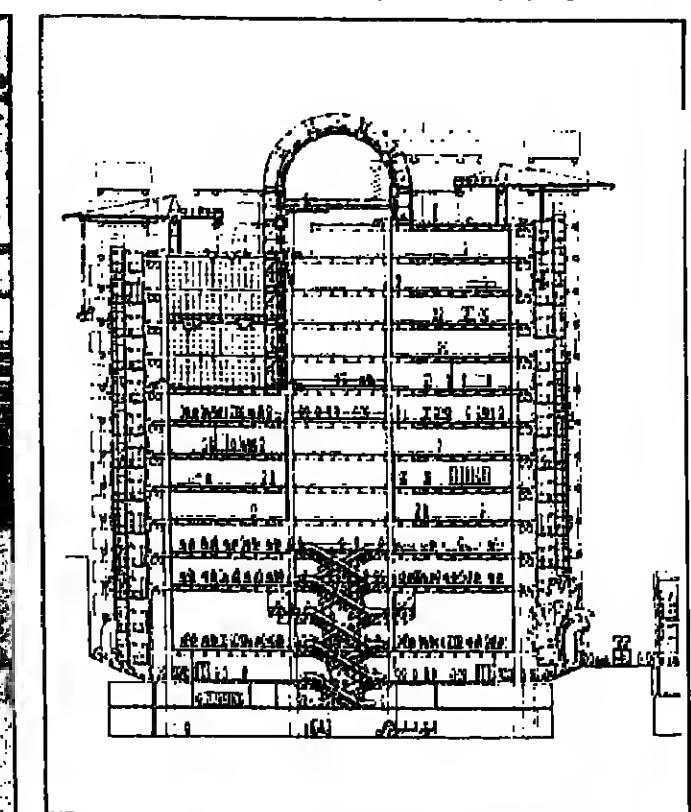
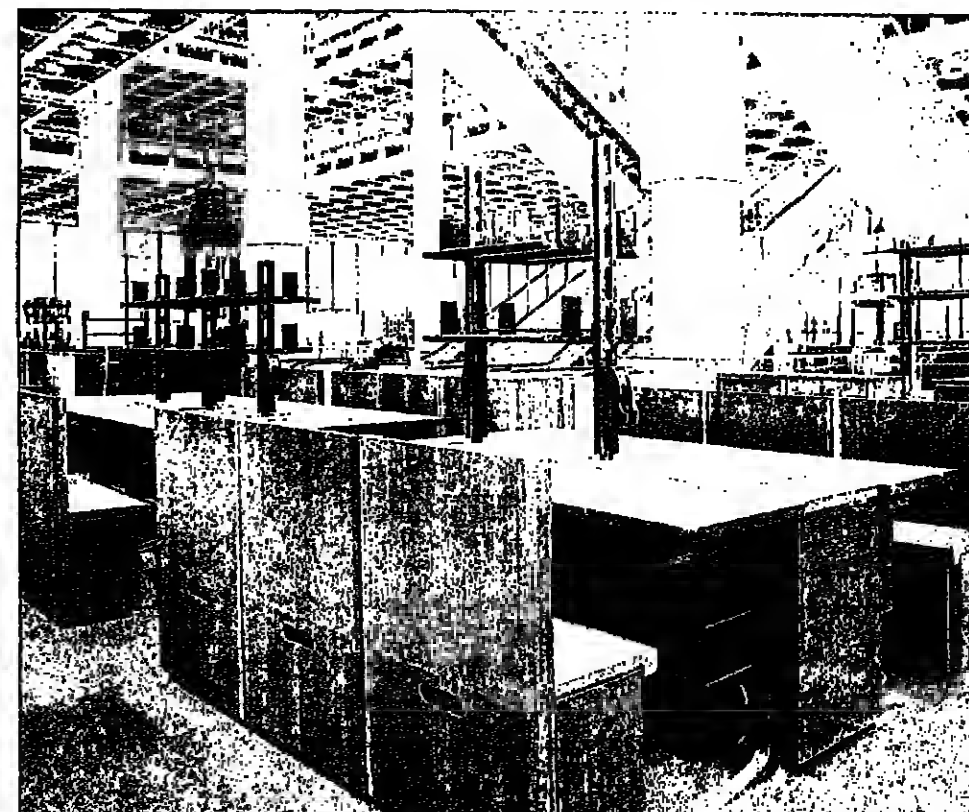
- Strength and stiffness.
- To have a system which could be constructed precisely, with a good finish, within the available time at a reasonable cost.

A variety of structures were examined and the most promising early solution had full-depth beams in the main span direction with smaller secondary beams flowing around the ring. This gave problems in the corner however and did not reflect the real structural behaviour which had high load concentrations at the column support points — especially on the inside atrium corner. By strengthening the beams between supports, and by introducing prestressing into the half-depth beams at the corners, a more isotropic solution



Column bracket and bracing system was found which helped.

Peter Rice on Lloyd's remarkable new headquarters, designed by Richard Rogers & Partners.



Cross-section through atrium.

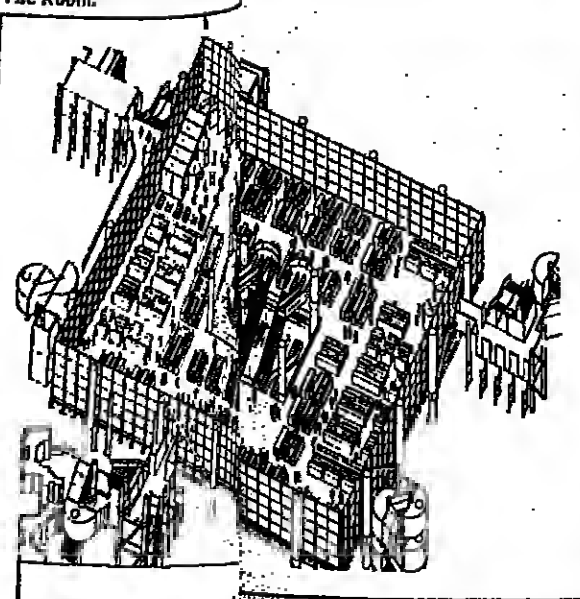
The trials helped in deciding the way construction joints would be used in the appearance of the beam grid and they helped when discussing formwork design with the subcontractors.

Gleeson, the subcontractor for the superstructure, opted for a system which could be broken down. If design was based on folded and welded steel frames with Wisa ply faces, Neoprene gaskets were built into the metal sections, which also formed rebates at joint lines. The components fixed together with bolts and wedges with adjustment for tolerance.

The columns and brackets supporting the main floor was the other key detail in the construction. It was here that

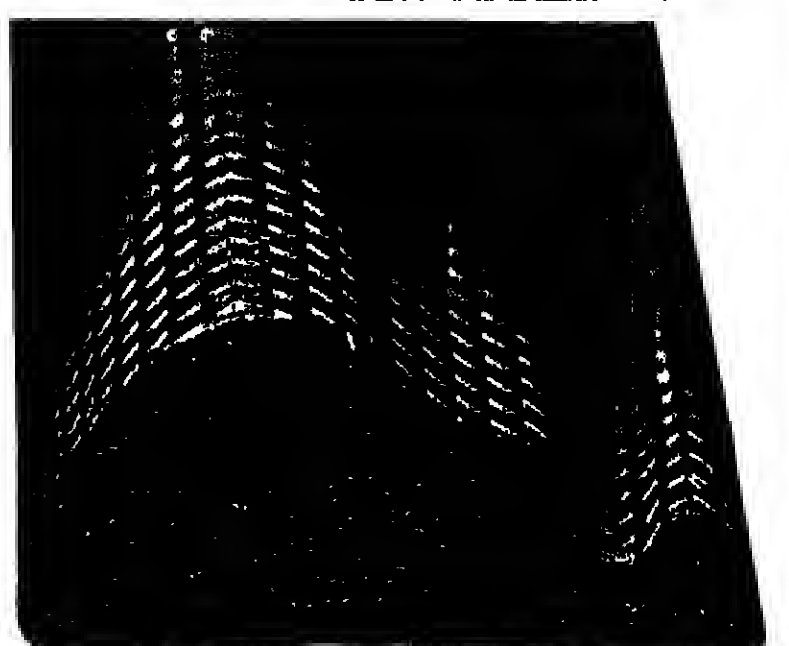


The Room.



Axonometric of the dealing room.

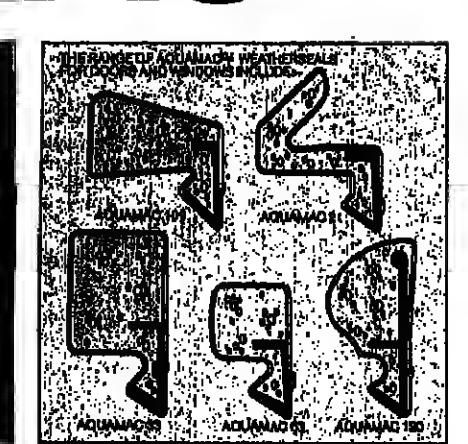
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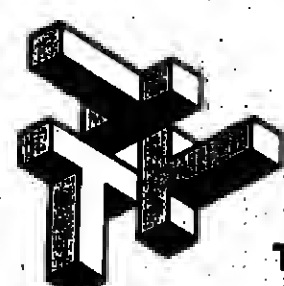
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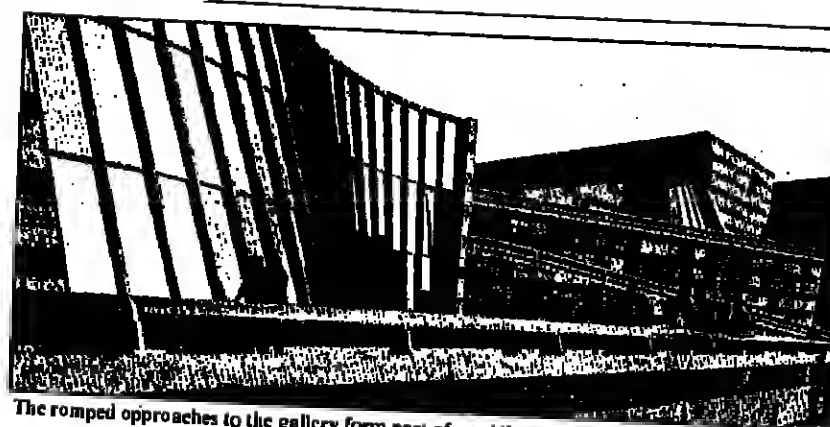
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The ramped approaches to the gallery form part of a public route.

STUTTGART's new art gallery opened in 1984 to much critical acclaim. The building has been hailed as a breakthrough for the new architecture; an original design that acknowledges the past while creating its own new style. Certainly, if the enthusiasm of the public is anything to go by, the building is a success.

The focus of the building complex is a large, open circular space called the sculpture court, around which the various exhibition spaces are planned.

STIRLING STYLE

Cecil Balmond discusses Arup's joint involvement in the structure and services for James Stirling, Michael Wilford & Associates' hugely successful Stuttgart Staatsgalerie.

opening onto terrace and foyer levels, and linked by a series of curving zig-zag ramps. An imaginative feature of the scheme is the pedestrian route for the public, which winds up

and round the central court, connecting Konrad Adenauer Strasse at the front of the site with Urbanstrasse at the rear. The public on this route may look into the sculpture court and

view the activity of the podium and terrace areas without visiting the gallery. Local marble and sandstone are used extensively for the external cladding to the build-

ing. Contrasting with this traditional look are the twisting glass walls of the foyer, the steel lattice canopy structures and the angular lines of the elevations themselves; it is a striking mix of high tech with classical form.

Ove Arup & Partners were invited to design the structure and services for the project, as part of a joint venture with Boll for structural engineering and Eser Dittmann Nohring for the engineering services. It was agreed that Arups would lead the engineering design up to scheme stage and then transfer the lead to the German-based team for the production of the tender and working drawings.

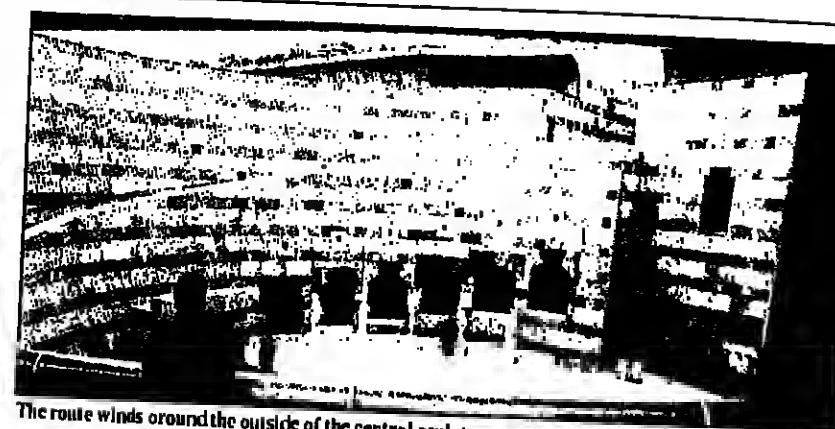
The client was the local government of Baden-Württemberg. The initial task for the design team was to work out a structural and services concept that would fit the tight planning of the various levels and yet not miss the building height above that of the existing gallery.

For the structure, down-standing beams were avoided where possible; floor slabs were designed to span directly onto columns or to be supported by walls serving as full storey-height bents. The layout of the services was planned to avoid large horizontal ducts. Consequently, the plantroom was stretched out along the whole length of the building with vertical service risers connected directly to strategic areas.

During the early concept stage the other matter for debate was whether an expansion joint was desirable. Wherever a joint line could be drawn in the structure the details became extremely contorted. The tight "layering" of the various levels did not lend itself to independent structural units; the walls located along all external sides of the building removed any "give" in the structure at the edges normally free for expansion and contraction, therefore it had to be a 90m by 100m structure without joints. It was agreed to deal with the problem by simple crack control procedures, based on the even distribution of strains induced by temperature and shrinkage.

In the detailed development of the structural design a series of finite element analyses was carried out on the main spanning wall/beam elements. Where stiffer wall elements framed into smaller and more slender elements local elastic stress distributions were calculated to satisfy the checking authority.

The competition brief required maximum use of natural light for viewing exhibits. Initially the upper gallery rooms were planned with fully glazed roofs. As the design progressed, however, areas of glazing were reduced to lower the air-condi-



The route winds around the outside of the central sculpture court.



Lighting and air-conditioning in a typical gallery space.



Lighting grid over the chamber theatre.

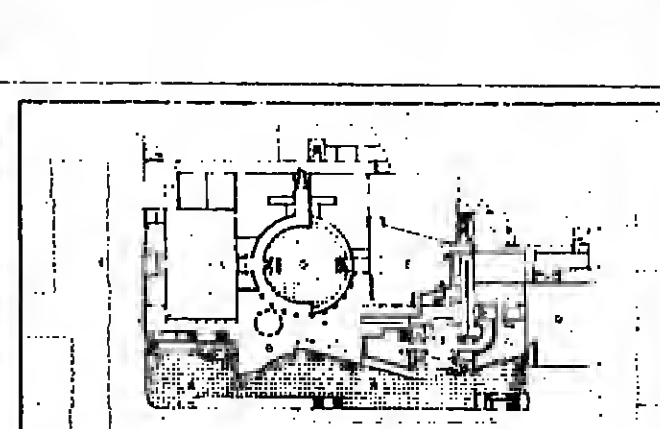
experts the air-conditioning systems serving the gallery rooms were designed to maintain temperatures at around 23deg C during summer; 19deg C during winter.

Spray washers, containing alkaline water, together with high-efficiency filters, were incorporated in the air-handling plant serving the exhibition spaces in order to prevent sulphur dioxide present in the external air damaging the exhibits. The system also incorporated frost protection coils and pre-filters, all located at the fresh air intake plenum.

For the upper gallery rooms

air is ducted from the basement air-handling plant to distribute along the edges of the 2m high ceiling void. The supply air is discharged at high level, at low velocity, around the perimeter of the rooms and extracted at skirting level via ducts within the wall linings, equalising vapour pressure in front of and behind the paintings.

Since the roof to the upper galleries is almost totally glazed, the ceiling void above the galleries is treated as a buffer zone, with its own dedicated air-conditioning systems. This reduces the air-conditioning load in the galleries, permitting



Entrance-level plan.

solar heat reclaim via the roof, which in turn is used to preheat the building's fresh air supplies.

In the theatre areas a 100 per cent recirculation of return air is incorporated to facilitate a rapid heating or cooling of the space. The supply and extract system were accommodated at high level, above the main grid ceilings and in the wall linings of the theatre. Supply is through banks of nozzles set in the wall linings while extract is through holes in the euneric ceiling.

Work on site began in 1978 and the job was completed in May 1984. The client's own state building construction depart-

ment, the Staatshochbauamt, acted as project manager on all phases of the project.

Not unexpectedly, Stirling's innovative design caused some critical debate, mainly among the local architectural fraternity, when he won the competition. Now the ingenuity of the design not only receives much acclaim from the critics, but is obviously expressed by the public's enjoyment of the building.

Those of us in the Ove Arup & Partners' team who were fortunate enough to work on the project found the experience exciting and rewarding.

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10. Specification 85 by David Macrae. Eighty-second edition of this annual reference source for architects and specifiers in the construction industry. Volume 5 in a commissioned new volume devoted entirely to specification clauses. The six volumes set is supplied in a library box. Price £57.50

Space of Earth—Architecture People and Buildings by Charles Kynett. The heavily illustrated book of the current Channel 4 series takes a fresh look at some key issues of architecture and planning over the last 100 years: cities; skyscrapers; mass housing; conservation; and future trends. (hardback). Inc P+P. Price £9.85 (paperback) £16.45

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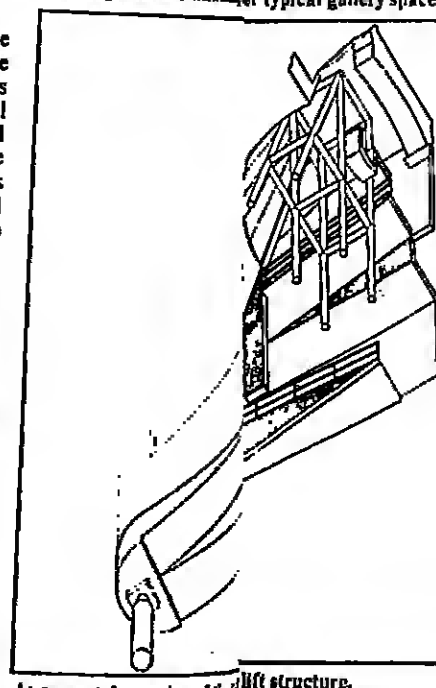
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Axonometric up view of the lift structure.



Structural and mechanical details of the building.

tioning load and attendant running costs, but still allowing viewing under natural light for 76 per cent of normal opening hours.

For viewing water colours and oil paintings the illuminating levels of 50 and 200 lux respectively were specified on the vertical surface 1.5m from the floors. With artificial lighting these levels are achieved by switching circuits in the upper gallery rooms and by dimming in the temporary exhibition space.

Natural light is controlled by adjustable motorised louvres mounted in the ceiling void. The substantial nature of these louvres help them to act as anti-burglar devices and also as thermal insulation when fully closed during the winter hours of darkness. The louvres are located beneath the roof glazing and span onto the top booms of the structural trusses.

Along the bottom boom of the trusses is a steel grillage to support the ceiling layer which is made up of glass, incorporating an ultra violet filter, which prevents harmful radiation entering the exhibition space.

Extensive tests were carried out with paintings hung in the model room for daylight and artificial light, using various glazing solutions for the roof and ceiling. It was found that the sole use of float glass produced an unacceptable green hue to exhibits. This was overcome by incorporating Albarino glass into the system.

Albarino glass has been developed especially for use on solar cells and has very high transmission factors for all wavelengths of light. But expense limits the extent of its use. The final make-up of the glazing system was:

At roof level a sandwich of 5mm thick Albarino, 1.5mm thick Thermolux-Gespinal, 5mm thick Albarino.

At roof level a sandwich of 5mm thick Albarino, 1.5mm thick Thermolux-Gespinal, 5mm thick Albarino.

At ceiling level 1m by 1m triple-glazed panels of 5mm thick Kristal glass, 12mm thick air gap, 5mm thick Albarino, 12mm thick air gap, 9mm thick laminated glass incorporating a 1mm thick UV filter.

For maintenance of the ceilings and the daylight control louvres in the roof spaces, catwalks and permanent moveable trolleys were provided within the roof zone, integrated into the structure and services planning concept.

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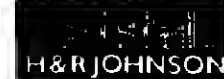
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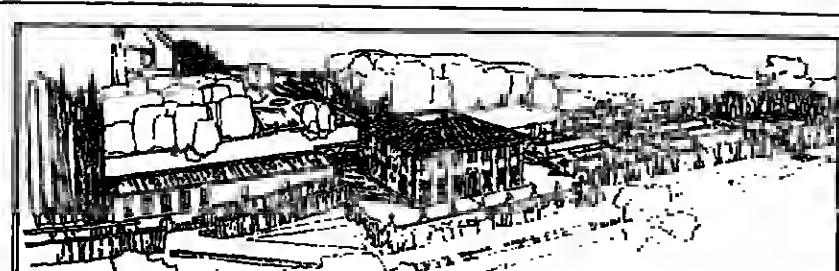
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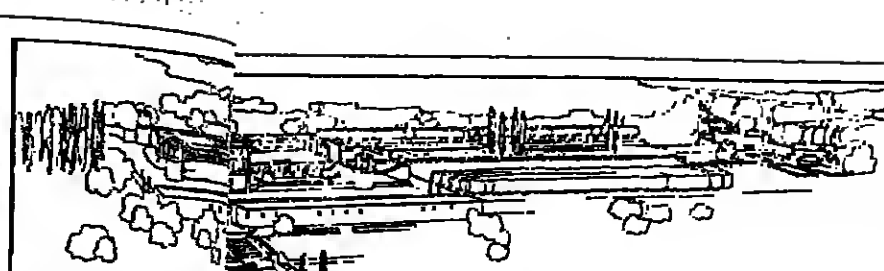
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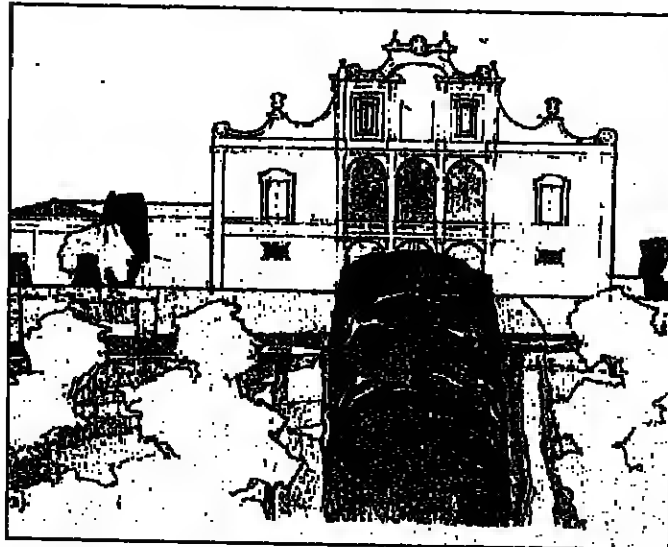
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Villa Madama, Rapallo, also, Giovanni de Udine and Giulio Romano.



Elevation of the Villa Gori, near Siena.

Return of a classic

By Alan Blanc

Italian Gardens of the Renaissance, J L. Shepherd and G A. Jellicoe (Academy Editions, £25).

It is a real pleasure to find one's favourite volume on Italian gardens back in print.

again, and in such sumptuous form.

I should explain that I started cribbing from Shepherd and Jellicoe's masterpiece with the RIBA Library copy, back in 1946, when faced with a weekend esquisse... *A Garden in N Italy*.

I have subsequently persuaded Kew to prepare slides of the key illustrations and these have been used for my landscape lectures at Kew Gardens since 1964. More recently I have turned the pages for inspiration with work at Plas Newydd (III.a), and finally, this spring as a Fulbright textbook for West Coast students at Washington State University. One can say that I know the masterpiece back to front!

The work by Shepherd and Jellicoe, in fact, dates back to 1923 when these two young fellows from the fourth year of the AA set out on their year-long grand tour of Europe, the topic of Italian gardens being the suggestion of their year master, L. H. Bucknell. The duties of putting together the first edition were shared, with Shepherd producing all the splendid renderings, ink sketches and photographs, while Jellicoe did the legwork on surveys plus the descriptive writing. Sir Geoffrey's "swan peanniship" is as crisp today as times past, and there's a well-balanced foreword that sets down the crucial philosophy behind the work.

The illustrations and text are timeless, the solidity of the sketches showing with perfect clarity the architectural structure of landscape, devised by such Italian masters as Bramante, Ligorio, Michelozzi and Vignola (III B & C). The range is, in fact, very wide and provides an excellent record in terms of graphics and photographs of these great gardens as they appeared in two enthusiastic in their 20s.

It would be interesting to see a companion volume that tells of the state of these places today and how repairs have or have not been effected.

A more significant grumble from my Ynkeestudents would be the extraordinary way in which the figures and plates are still numbered. I know from personal experience that it all helps to get to know the book back to front, but I do consider that the 1986 reader might be offered captions throughout and an index.

Such grumbles shift away as one turns the pages (almost Crown Folio) instead of fumbling through Tirniti's stingy edition of 53 and when one can "walk through" one's chosen paradise with plan, section and photography available to guide the mind's eye through light and shade, parterre and water, and all the delights of that garden of the world, whether it be the Roman campagna, Tuscany or Venetia. There are sylvan words to

Villa Bombed (Colli), with di Tito with Michaelangelo.

guide the thoughts and following is offered to wish to follow Sir Geoffrey's theme.

"The most general principle suggested that of the gardens should be defined as they left the like water ripples spread from a centre, to die gradually in their surroundings, lines always formal but less emphasised. The verse of this was a very higher ideal. It aimed that garden should merge into but from, its surroundings. There is no garden where has been tried and achieved, the Villa Lante at Viterbo. The excited stream of pours from the woods, down hillside, and floods into the of formality in the square garden below."

Other words like Jellicoe's 1925 notion of *Formality and Design* could perhaps turn the tide back from tame Neoclassic or deadly social-realist vistas as dreamt up by Boffi, Krier and Co.

Formality and Design (circa 1925): "The bases of abstract design, running through history like a silver thread, are independent of race and age. Their one unchanging form of expression is through a pattern, both a wholesome admission of human limitation, and a sturdy foundation from which afterwards to build. Pattern is the architectural prototype of the formality of life, and in the same way is modified by the circumstances of the moment, principally those governing the relation of formality to informality. In any design where nature is admitted, such as the garden, this relationship is the first consideration."

The special sequences and theirebb and flow as illustrated by Jellicoe and Shepherd are very different from the deadpan space filling seen in Boffi's "parterre" for a dried-up river bed in Valencia. The latter does not lead the eye but blocks it at every opportunity.

The visual delights prepared by the late John Chiene Shepherd (1896-1978) make the volume into a classic and one that should be on every architect's bookshelf whether a "landscape" or not; should the reader be afflicted by post-modernism then *Italian Gardens* would show them that "Things ain't what they used to be".

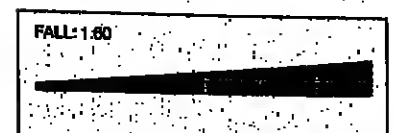
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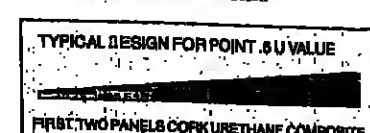
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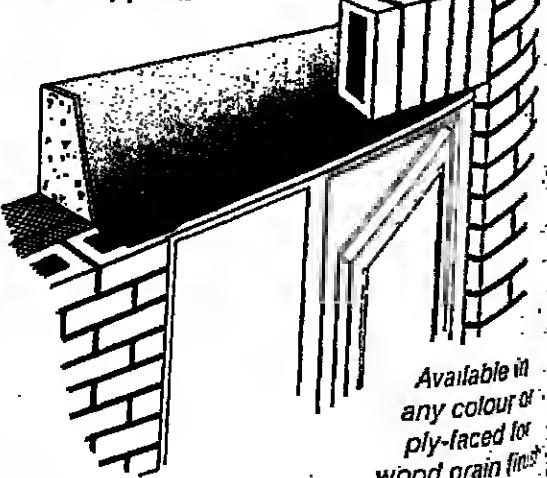
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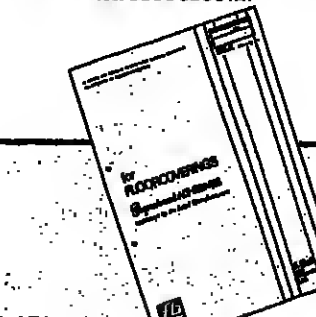
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This concern, over what could become an expensive concept and one of limited worth, has now excited the Construction Industry Research and Information Association (CIRIA) into activity. In July this year the first meeting of a new working party took place to look into the whole business of

QA. It will try to answer such questions as: how will QA be applied? what will it cost? who will pay? who will set the standards? and who will be liable?

It is hoped that the new working party will provide a channel through which information can be exchanged between various bodies and so promote co-operation and a common understanding of the needs of the industry.

If you would like more information on the products on these pages, fill in and return the pre-paid enquiry card.

Tubular handrails



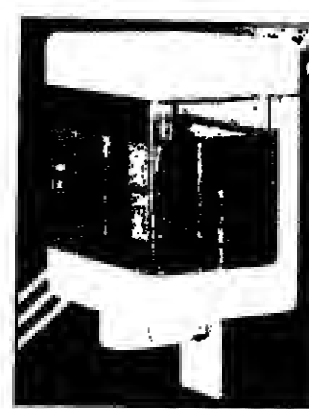
CRESCENT of Cambridge has announced that its new tubular handrail can be fitted to its spiral stairs at little greater cost than a normal flat rail. Previously, such refinements could have added hugely to the overall cost of the stair. Initially Crescent has introduced the tubular handrail in 30mm mild steel, powder-coated and stove-enamelled. Any BS colour can be applied and other handrail sizes can be made to special order.

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Spa baths

COLLECTIVELY known as Hallmark Spas, five new spa baths have been introduced by Aquatech Marketing. Intended for normal domestic use, these spas bridge the gap between existing whirlpool systems and the multi-person spas which are too large for most bathroom installations. All Hallmark Spas are vacuum-formed in acrylic with a backing of heavy reinforced grp. They are available in white and six colours to complement the decor of most bathrooms. Other colours can be supplied to order.



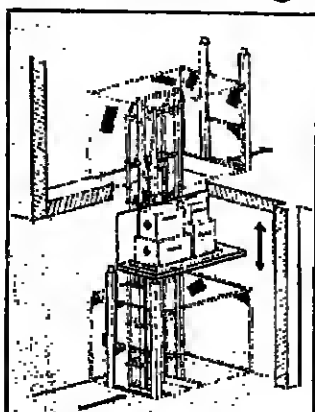
Enter 106 ON EXPRESS ENQUIRY CARD

Automatic dehumidifier

COMPACT and attractive appearance, the new Weint Hy 1200 Model 1120 dehumidifier is said to be capable of extracting 1.5 litres of water a day from an atmosphere with temperature of 20deg C and 90 per cent humidity — enough, control condensation problem an average 2/3 bedroom-draft. And all this is done at the expenditure of only between 1 and 100W of electricity. Once a required level of dryness, equipment runs completely automatically.

Enter 102 ON EXPRESS ENQUIRY CARD

Reciprocating conveyors



NOT subject to elevator codes, but said to comply with all European building standards, Giant Lift's Model RJS Vertical Reciprocating Conveyors are self-contained and self-supporting. They have an all-welded structural steel construction and can be installed indoors or out. Custom-built with load capacities from 1,200kg to 44,000kg, the maximum lift height is 24.4m. RJS conveyors can be mounted on the floor or in a shallow pit with electric hydraulic or electric cable drives.

Enter 107 ON EXPRESS ENQUIRY CARD



Bay roofs

OFFERING cost-effective and maintenance-free elevational embellishment, the new GRP Storm King Plastic bay window roofs have the appearance of authentic lead-covered roofs. There are three models, all available with fascias in any BS colour. Roofs are delivered complete with structural timber, which have previously been treated with preservative. Other materials are plywood soffits and 100mm thick insulation.

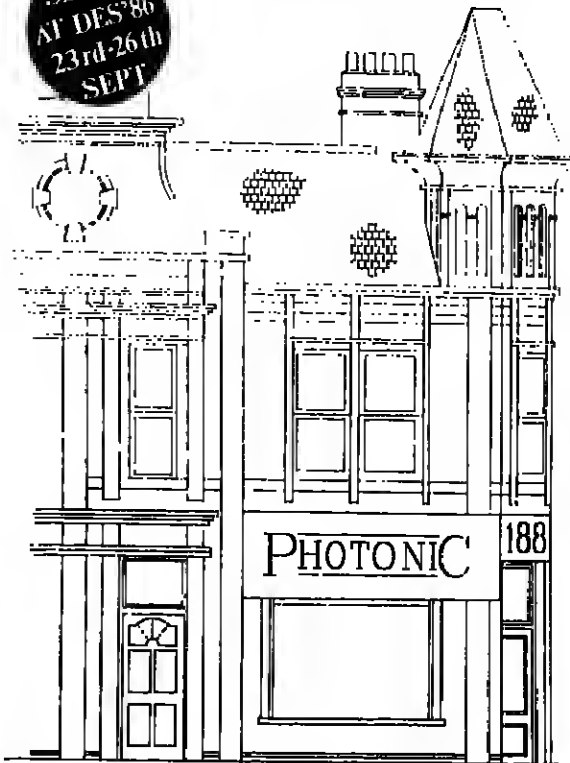
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Thinking CAD?

Think AutoCAD

Think Photonic

SEE US AT DES'86 23rd-26th SEPT



Today over 50,000 users are creating drawings and designs with an ease and accuracy never experienced before thanks to AutoCAD.

AutoCAD is the most widely used CAD system in the world and is suitable for many applications including architectural drawing, interior design, electrical engineering, chemical engineering, mechanical engineering and civil engineering.

But drawings are only part of the AutoCAD expertise, it has many more interesting features including a set of pre-defined library symbols, the ability to exchange drawings with mainframe CAD systems using its internal programming language translators, a database management program and much, much more.

Although these features are normally only available on mini or mainframe computers the most impressive feature of AutoCAD is that it is available on any IBM compatible micro.

Thus adding AutoCAD together with a plotter and pointing device gives you a fully comprehensive CAD system for a very competitive price.

By ringing Photonic now and ordering a complete system with AutoCAD you will also be entitled to a free 2 day training course just to show you how easy it is to use AutoCAD.

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CHESHIRE M33 1RN.
TEL: (061) 973 8367.
TELEX: 666387 Photonic



benson CAMBRIDGE COMPUTER GRAPHICS Roland SPERRY
HEWLETT PACKARD Tandon olivetti AUTOCAD

Enter 39 ON EXPRESS ENQUIRY CARD

We'd be the last to dispute the necessity of stringent fire regulations. In fact, we applaud the British Standards Institute for its unflinching thoroughness. But the fact is, complying with building regulations for fire glazing imposes design restrictions that have always been a burden. Enforcing uniformity and stifling creativity.

Until now. With new technology gained in the development of fire resistant glazing for several large projects including the Hongkong Bank's remarkable new headquarters, Elemeta has created a new range of Fyrespan glazed fire doors and screens, offering architects a level of design freedom never before possible within the constraints of BS476.

Fyrespan AF60 glazing, for example, is the first fully glazed system to comply with BS476, for stability, integrity and insulation (resistance to heat radiation).

All Fyrespan systems are fire rated for at least 1 hour, with Fyrespan A120 providing in excess of 2 hours stability and integrity.

If you'd like to strike a blow for freedom, find out more about Fyrespan — phone us now, or clip the coupon.

Elemeta Fyrespan
A Division of Elemeta Limited
Gorst Road, Park Royal, London NW10 6LT
Telephone 01 965 8744, Telex 887228

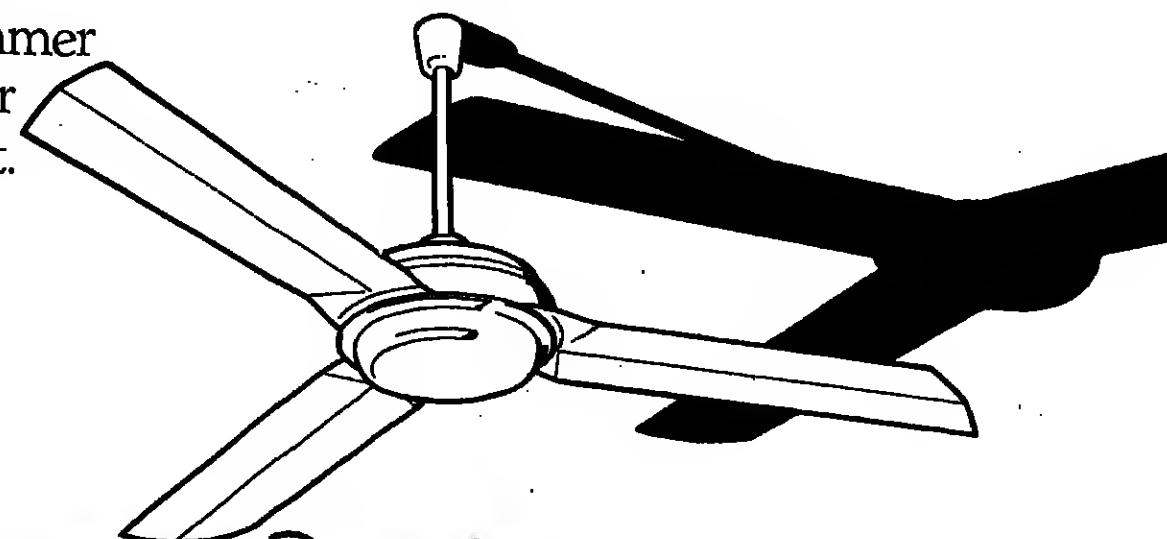
FYRESPAN
Fire resistant glazing systems

I'd like to strike a blow for freedom. Please send me the facts about Fyrespan.

Name _____
Position _____
Company _____
Address _____
Tel _____
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A Division of Elemeta Limited
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FIRST DIVISION



If you want to keep the centre forward out of the centre court, you need Acordial Gym Dividers.

Apart from its robust simplicity and maximum value, the Acordial is unique in that it leaves all affective room space entirely free from obstruction. Folding up quickly and affectively it meets the most stringent requirements for both durability and safety.

acordial

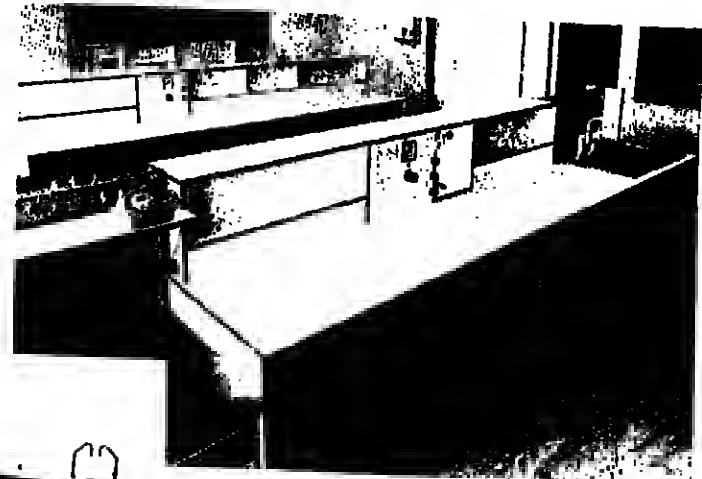
Acordial (UK) Limited, Kabbell House, Capenders Park, Walford, Herts WD1 5BE. Tel: 01-428 0077 Telex: 282248

Enter 40 ON EXPRESS ENQUIRY CARD

Cygnat laboratory furniture for the experience of a lifetime

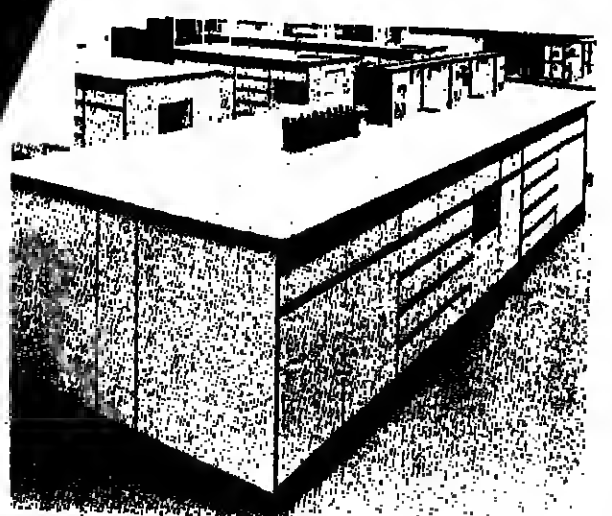
Cygnat Joinery Ltd. are specialists in the manufacture of industrial and medical laboratory furniture and DHSS/MDB hospital furniture.

Cygnat products are in use in almost every U.K. university, plus numerous hospitals and further education establishments. The company has also become increasingly involved in exporting to Africa, the Middle East and Asia.



Laboratory Furniture

The Cygnat range of laboratory furniture includes underbench units (mounted, suspended or fixed types), wall units and bench assemblies together with a full range of bench tops and frames (see publication PH21).

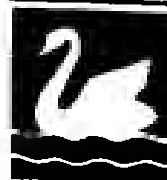


Fume Cupboards

Cygnat 1000 new generation fume cupboards are competitively priced with exceptionally low energy consumption. They give maximum operator protection conforming to BS5726 and are attractively designed. Cygnat also complies with the requirements of DD80. (See publication PH22).

Hospital Furniture

Cygnat have for several years been a selected manufacturer of MDB furniture for the DHSS hospital programme. In addition to MDB/CDB (see publication PH20) Cygnat offer an extremely competitive in-house range. A full installation service is also available. Fill in the coupon for further details.



Cygnat Joinery Limited

Craftsmen in Laboratory Furniture
Higher Swan Lane, Bolton
BL3 3AH Tel: Bolton (0204) 62121
Telex: 635393

A member of the Townson Group of Companies

Please tick the appropriate boxes for the publication/s that you require. Complete the coupon and return it to the address shown.

☐ PH21 ☐ PH22 ☐ PH20

Name: _____

Company: _____

Position: _____

Address: _____

Tel No. _____

New Products

Conservatories

MACHIN Designs has introduced a new range of all-aluminium conservatories. These supplement its previous range of combined wood and aluminium conservatories. The aluminium form of construction frees Machin Design from the size limitations of its previous type of structure. This means that the new range of conservatories is particularly suitable for large commercial purposes, such as shopping malls.

Enter 135 ON EXPRESS ENQUIRY CARD

F R Glass

SCHOTT Glass points out that its fire-resistant glass, Pyran, has one significant advantage over alternative fire-resisting glasses — one thickness of glass satisfies all fire ratings. Pyran is not wired or laminated, it does not crack in intense heat and it stays clear at all times. What is more, it is only 6.5mm thick and weighs no more than 15kg per square metre whether rated at 30 minutes or two hours. This makes massive insulated fire-resisting screens unnecessary.

Enter 136 ON EXPRESS ENQUIRY CARD

Man-made slates

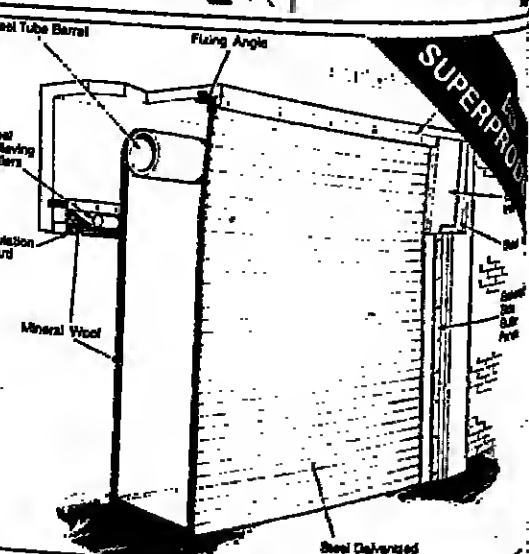
TOSCHI man-made, asbestos-free slates are now available in this country from Allan Dinman. Three features set Toschi slates apart from its rivals. First is the Stenscheit process which concentrates more pigment in the upper layers of the fibre cement base, second is the entire content of the slates (edges, back and front) with acrylic to inhibit efflorescence; and finally, the packing of 20 slates with paper interleaving to avoid scuffing or scratching.

Enter 138 ON EXPRESS ENQUIRY CARD

Hand dryer

INFRA-RED sensors activate the new remote warm-air hand dryer from Saville Stainless in the user's hands approach. Safe, effective and efficient, the dryer operates for 60 seconds and then automatically cuts off. With a noise level of 65dBA at 1m and a throughput of 40m of air per minute at 50deg C above ambient, the unit has high performance, all within a compact casing — 260 x 250 x 135mm.

Enter 139 ON EXPRESS ENQUIRY CARD



FIRE CURTAIN

A REAL breakthrough has been announced by Wormald Building Products. Its new Pyroshield fire curtain has been tested by the more than five hours without failure. Its integrity remained unbreached until the 290th minute and it achieved the insulation rating of 180 minutes. This is an astounding result considering that the insulation feature of BS 476 Part 8: 1972 is never a mandatory requirement in present building legislation. The normal approach to a four-

hour fire shutter is to insert doors with a space between the door and the frame. Now Wormald has achieved a result with a single piece of equipment which looks rather like a huge roller blind, the "Pyroshield" which is made up of galvanneal steel curtain units, filled with mineral wool insulation. The unit descends as a double curtain in event of fire to totally seal the opening, which can have a width up to 12m.

Enter 141 ON EXPRESS ENQUIRY CARD

Technical literature

Wide-span glazing

SAID to be a new concept in natural light structures, Duplus Domes has introduced Lightspan for use in covered ways, bridge walkways and similar structures. In a recent four-page colour leaflet Duplus Domes has explained the service it offers, which includes a team of consultants on hand to help the designer with any problems during all stages of work. Lightspan consists of aluminium framing in various finishes, combined with single or double-glazing in several glazing materials.

Enter 142 ON EXPRESS ENQUIRY CARD

Composite cladding

Profiles

A choice of 5 different and 2 different profiles taken from the PRF (Precision Resin Forming) range gives full technical information, dividing the range into two groups — those which give U values lower than 0.6 and those with U values lower than 0.4. In addition to design data, the leaflet contains installation recommendations and gives a series of drawings showing finishing details.



Enter 143 ON EXPRESS ENQUIRY CARD

Moveable walls

TRACKWALL has introduced a new four-page RIBA data sheet covering its Trackwall moveable, fire-rated acoustic panel system. Packed with useful detail drawings, this sheet explains how Trackwall units can be easily stored and, when extended, can give high levels of sound attenuation between adjoining rooms. The system is virtually maintenance-free and can be operated by unskilled personnel. Panel heights up to 11m can be supplied with a double skin steel construction, filled with acoustic insulation.

Enter 144 ON EXPRESS ENQUIRY CARD

Victorian lamps

VICTORIAN and Edwardian style street lamps in the English Street Furniture range are illustrated in a new colour brochure. Containing sufficient information for the specifier to make a choice from this company's extensive range, the brochure gives details of all the available options extra, like photo-electric switches, time switches and choices of finishes. Shatterproof glazing is standard for all ESP's lanterns.

Enter 145 ON EXPRESS ENQUIRY CARD

BREAK WITH AUTHORITY



Take the new Building Regulations. The Building Control Officers and Approved Inspectors have been studying these for some time; they are the authority. Bound to be one up on you when it comes to the nitty gritty.

But there are one or two important things you should really know. First and foremost the Regulations themselves, quite a slim document, are the law. The rest, Manual and Approved Documents, show you how you might choose to meet those regulations. It's the same as the old bye laws. They were in one typeface, the 'deemed to satisfy' provisions were in another and therefore not binding.

Any previously approved Celcon form of construction will meet the requirements of the new regulations. For Celcon nothing has changed. Take for instance, insulation, 125mm of suitably finished Celcon Solar inner leaf to brickwork gives you 0.6 and therefore meets that regulation.

If you want a slimmer wall 150mm solid plus tile hanging or something similar will also do the business.

And when it comes to below d.p.e., frost resistance, fire resistance, fixings and things we could go on and on and on, but it's all in the Celcon book of knowledge.

Clip the coupon for your copy, then you too can speak with authority.

Head Office and Southern Region Sales Office: Celcon Limited, Celcon House, 289-291 High Holborn, London WC1V 7HU. Telephone: 01-242 9766.
Northern Region Sales Office: Celcon Limited, PO Box No. 2, Power Station Road, Rugeley, Staffordshire. Telephone: 0889 3421.

Send coupon now to Celcon "Book of Knowledge Dept", Celcon House, 289-291 High Holborn, London WC1V 7HU for FREE copy of Celcon Technical Handbook.

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Position: _____

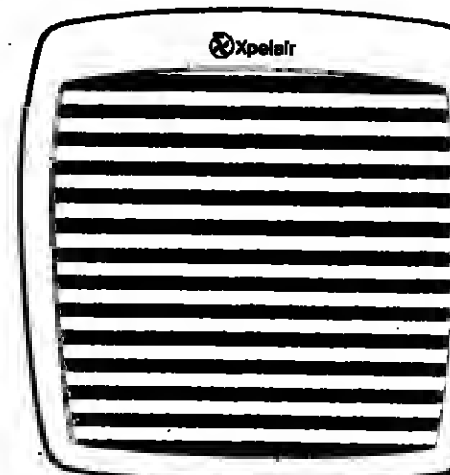
Company: _____

Address: _____

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expert. Highly skilled in all aspects of ventilation. Having product range and experience to cover every application.



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Clear the air with **Xpelair**.

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Dateline

Items for consideration must be received 10 days prior to publication

This week

Today until Sunday
London Fields artists open studios,
exhibition of the work of 50 artists
in their own studios.
Venue: Space Studios in Victor
House, Richmond Road and
Martello Street, all of which are in
Hackney. Friday 6-9pm, Saturday
and Sunday 12-7pm.
Details: Space, 01-778 7751.

Today
Urban Conservation: politics &
values, seminar organised by
Oxford Polytechnic.
Venue: Oxford Polytechnic,
Headington, Oxford. 9.30am.
Cost: £35.
Details: Carolin Tidbury (0865)
60035.

Today
New developments in practice,
annual conference of the
association of consultant
architects.
Venue: Sedgwick Centre, London
E1.
Details: Jeanne Radford (0272)
293372.

Saturday and Sunday
20th century living in houses of the
past, a two-day lecture series
organised by the Huntingdon
Centre.

Venue: The Huntingdon Centre,
The Vineyards, Bath BA1 5NA.
Details: 01-708 1976.

Tuesday
Lunchtime lecture on Norman
Foster by Alan R. Best, editor of
Designer magazine.
Venue: Reynolds Room, Royal
Academy of Arts, Burlington
House, Piccadilly, London W1.
Details: RAA, 01-636 7076.

Tuesday
The use of stone in building, an
afternoon course organised by the
standing committee on natural
stone.
Venue: Geological Museum,
Exhibition Road, London SW7.
Cost: £25 per delegate, £8.50 for
students registered with
architectural schools.
Details: The Secretary SJCNS, 82
Cavendish Street, London W1M
8AD.

Tuesday
Low-cost CAD workshop organised
by the Building Services Research
and Information Association.
Details: Ann Noblett, 01-229 2488.

Tuesday
Latent Damage Act 1986, Liability
for latent damage, seminar
organised by RIBA Services
Ltd.
Venue: Gloucester Hotel,
Harringdon Gardens, London
SW7.

Details: Charlotte Dale, 01-580
5533.
Wednesday
Decoding the wind code, tutorial
organised by the Building Research
Establishment.
Venue: Building Research
Establishment, Garston, Watford.
WD2 7JR.
Cost: £46. Those attending the
tutorial should bring their copy of
the code with them, copies are
available from the British
Standards Institution at 61 Green
Street, London W1 or 195
Pentonville Road, London N1.
Details: Patricia Rowley BRE,
Garston, Watford WD2 7JR. Tel:
(0923) 674040.

Wednesday
Structural surveys, seminar
organised by Liverpool
Polytechnic, Department of
Surveying.
Venue: Tickle Trout Hotel,
Preston New Road, Sarnesbury,
Preston, Lancs. L30 9pm-6pm.
Cost: £25.
Details: Anne Roberts, 051-207
3581 (ext 2601/2602).

Wednesday-Friday
Three one-day "hands on" computer
workshops.
Venue: The Construction Industry
Association, Oldhall Place,
Cambridge CB2 3QJ.
Details: Information Officer,
CICA (0223) 311246.

Thursday
Right to roam, lecture by Roger
Clark, assistant director of the
Countrywide Commission.
Venue: East Midlands Landscape
Group, Lockington Hall,
Kegworth, Derby 7-7.30pm.
Details: Phil Reach (05097) 2772.

Thursday
A future for existing buildings, two
seminars on refurbishment
organised by CIBSE.
Venue: Building Engineering
Centre, Balham, London SW12.
Cost: Whole day, CIBSE members
£37.95 non-members, £49.45.
Details: CIBSE, Delta House, 222
Balham High Road, London SW12
9DS.

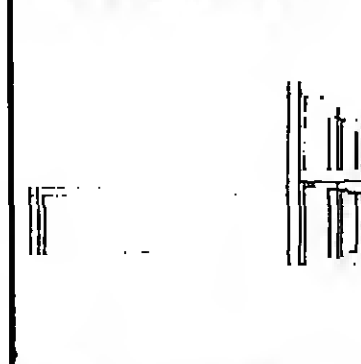
Wednesday
Value for money — Planning gain:
how to calculate in one-day course
organised by Oxford Polytechnic.
Venue: Oxford Polytechnic,
Headington, Oxford.
Cost: £25.
Details: Carolin Tidbury (0865)
60035.

Wednesday
Design energy and airports,
organised by the RIBA.
Venue: Hatfield Lodge Hotel, on
the A1 Hatfield Hertfordshire.
Cost: £15.
Details: Regional Energy
Efficiency Officer (East), Room
227, Ebury Bridge House, 2-18
Ebury Bridge Road, London SW1
8QD. Tel: 01-730 9678 (ext 375).

Wednesday — Thursday
Building Regulations and approved
documents, a workshop organised
jointly by Salford University and
RICS NW Building Surveyors
Division.
Venue: University of Salford,
Salford M5 4WT.
Details: Trevor Mole, Department
of Engineering, Civil Engineering,
Salford University, 061 736 5843
(ext 7117) or Merle Carboni
PICUP development officer (ext
468).

Thursday
Architects and their work, lecture by
Renzo Piano, building workshop,
Genoa.

Friday until November 14 Tadao
Ando: breathing geometry, exhibi-
tion of the Japanese architect's
work. Venue: 911 gallery 26-28
Cranmer Street, London W1M 311F.
Details: 911 gallery, 01-486 3555.



Venue: RIBA, 66 Portland Place,
London W1. 6.15pm.
Details: RIBA 01-580 5533.

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Details: CIBSE, Delta House, 222
Balham High Road, London SW12
9DS.

Exhibitions

Saturday until November 1
Ruth Duckworth and Jonel Leach:
New ceramics.
Venue: British Crafts Centre, 43
Earlham Street, London WC2H.
Details: British Crafts Centre, 01-
836 6993.

Saturday until November 9
Keith Bennett drawings and
watercolours.
Venue: Guildhall Gallery,
Winchester, Hampshire.
Details: (0962) 62751.

Until October 15
Revolving renovations.
Venue: Building Centre Gallery,
Store Street, London WC1E 7BT.
Monday-Friday 9.30am to 5.15pm.
Saturday 10am-4pm.
Details: Marilyn Wint, 01-637 1022.

Until October 18
New designs in furniture and lighting
constructions — Linda Green.
Venue: Prescott Gallery, 369 High
Street, Edinburgh EH1 1PW.
Details: Prescott Gallery, 031-225
2652.

Until October 25
Proposals for the Royal Opera
House, Covent Garden by Jeremy
Dixon, BDP, including drawings,
paintings and models.
Venue: Opera House Phase 1
extension, James Street, Covent
Garden, London WC2. Monday-
Saturday 12.30pm-7.30pm.

Until October 25
Plus minus, exhibition of the paper
sculptures of Kisa Katwiskima,
organised by the Architectural
Association.
Venue: Architectural Association,
34-36 Bedford Square, London
WC1B 3BS.
Details: 01-636 0974.

Until October 31
With map in mind, an exhibition of
two projects from Belgrade,
Yugoslavia: an investigation into
alternative urban models by Dr
Miro Perovic and a proposal for
the reconstruction of Central New
Belgrade by Dr Miro Perovic and

Danislav Stojanovic.
Venue: Second-floor gallery, 66
Portland Place, London W1.
4AD.
Details: RIBA, 01-580 5533.

Until October 31
Norman Foster, an exhibition:
Foster Associates' winning
competition entry for a
contemporary art centre and
meditation in Nimes.
Venue: Institute Francaise, 17
Queensbury Place, London W1.
Details: Karen Liebreich, 01-
6211 (ext 38).

Until December 21
New architecture: Foster, Beyer,
Stirling.
Venue: Royal Academy of Arts,
Piccadilly, London W1V 0QS.
Details: Royal Academy of Arts,
01-734 9052.

Coming soon

October 18
Development control: negative
positive, seminar organised by
Association of Christian
Planning and Architecture.
Venue: Family Centre, Great
Street, East Oxford. 10am-4pm.
Cost: £10.
Details: TICCP on (0533) 51111.
Andrew Patrick on (0202) 0804.

October 20
Building — a seminar for people
organised by the British Standards
Institution.
Venue: BSI Conference Centre,
Hampton, House, Great Street,
London W1.
Details: Gordon Orban,
Marketing Department, BSI,
Milton Keynes MK14 6LE. 01-
320033.

October 20-21
User interfaces, gateway or
bottleneck? a conference orga-
nised by the Gottlieb Duttweiler
Institute.
Venue: The Gottlieb Duttweiler
Institute, CH 8803,
Rueschlikon, ZH, Switzerland.
Details: Dr Thomas Berner,
724 0020, Zurich office, 01-4
37 16.

October 20-23
Responding to the Audit Commission
report (Saving energy in local
authorities), a residential for
senior management in local
authorities organised by the
Energy Studies.
Venue: Avery College,
SE9.
Cost: £250.
Details: Centre for Energy,
South Bank Polytechnic, 80
Road, London SE1 0AA.

October 21
Lecture on Richard Rogers
Martin Pawley, architect,
correspondent for The Open
Venue: Reynolds Room, Royal
Academy of Arts, Burlington
House, Piccadilly, London W1.
Details: AAA 01-636 7076.

Subscription details

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wood St, London SE18 6QH (01-855 7777).

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APPOINTMENTS

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London EC1R 6QH.
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Published on Friday. Latest copy date is
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Architectural Technicians

We require Technicians with enthu-
siasm and ability to join our expanding
Chelsea practice. Good salary and
excellent working conditions are
offered to the successful applicant.

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2 Jubilee Place, London SW8 8TQ Telephone 01 361 5432

The St Albans office of Design Team Partnership
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SENIOR ARCHITECTS
To take complete charge of a variety of interesting projects
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With experience of design development and production drawings,
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Good prospects and opportunities with salaries to match ability and
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Please apply, with CV, to Edna King at our St Albans office Design Team
Partnership, The Mission Hall, 36 Clifton Street, St Albans, Herts, AL1 3RY.
Telephone No 0787 35137.

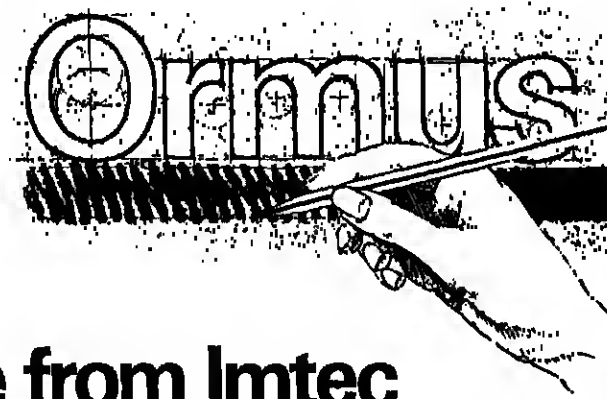
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to take the responsibility of running several phases of housing refurbishment scheme.
Ability to control work on site together with project administration & knowledge of the
contract is essential. Applicants should have a background of running jobs on site
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Fringe benefits and salary by negotiation. Please write with CV to:
Richard Menthorne, Broadway & Malyan, Osprey House, Station Road,
Addlestone, Weybridge, Surrey KT15 9BH
a good designer to join (initially) a design team now being formed for a prestige project.
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APPOINTMENTS

WHILE I WAS AWAY ...

... on my holidays, the office had yet another record month - does this mean something? Fortunately we're now flooded with a record number of vacancies for Senior Technicians, recently qualified Architects, Project Architects and Associates.

For the widest range of informed choice of temporary and career vacancies throughout England - and to help us prove that records can also occur when I'm in the office - register with us now.

RIBA Appointments Bureau
66 Portland Place
London W1N 4AD
Tel: 01-580 9587
Official Recruitment Consultancy of The Royal Institute of British Architects.

BUILDING DESIGN

is looking for a

FEATURES WRITER

Applicants would be required to show they can

- (a) write well
- (b) write to a deadline

- shortlisted candidates would have to write a test piece.

Applicants should send us a brief cv, plus any relevant written work.

Write to: The Editor, Building Design,
30 Calderwood Street, London SE18 6QH

ARCHITECTURAL TECHNICIAN

Salary £8,391-£9,218 p.a.

An interesting position exists within the Health and Housing Department for someone to work on a variety of new build projects comprising sheltered housing, rental and joint venture schemes and some modernisation works.

Mid Sussex covers some 82,180 acres set in the heart of beautiful Sussex countryside and runs from the Brighton boundary to the Surrey border.

Applicants must be able to work within a small team and possess an enthusiastic and flexible approach. Qualifications to H.N.C. Building or MSAAT standard would be advantageous but people with experience will be given equal consideration. In return we offer an excellent car user allowance, relocation package in appropriate circumstances, and flexible working hours scheme in operation.

For an application form and job description contact: Personnel Department, Mid Sussex District Council, 'Oaklands', Oaklands Road, Haywards Heath, West Sussex RH16 1SS (Tel: 0444 468168 Ext. 2278). Closing date 27.10.86.

Architectural Technician

This busy local authority practice with an interesting and varied workload wishes to appoint an additional member of staff who can demonstrate a commitment to working in the community.

To join a team of four under the direction of a Team Leader to assist in the preparation of production drawings for various projects. Whilst the work will initially involve the modernisation of municipal housing, all architectural teams carry out a variety of projects.

Candidates should have three to four years' minimum experience since obtaining HNC qualifications with membership of SAAT preferred, and should have the ability to produce clear, well considered working drawings. They should be technically competent with a good sound knowledge of traditional building construction.

The salary offered will be within Scale 5/6/801 of the National Joint Council Scale (£8,391 to £11,271 per annum).

Application forms and full details are available from the Personnel Officer, The Guildhall, Cambridge CB2 3QJ, telephone number 388877, ext. 270, to whom applications should be returned not later than 24th October 1986.

City of Cambridge

An equal opportunity employer

To place your advertisement telephone 01-855 7777 ext. 453 or 8004 telex (no 960381) or write to: Paul Hanks Building Design, 30 Calderwood Street, London SE18 6QH.

Classification: ADVERTISING RATES £150 per single column centimetre. Box number 25. 25 columns per page.

Acceptance: Published on Friday. Latest copy date is first post Wednesday prior to publication date or by telephone up until 4.30 pm.

Cancellation: Seven days prior to publication.

stirling

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ARCHITECTS - Sen. Arch. to work on interesting commercial schemes in London - Architect with job running exp. and design ability for a London practice - Architect with 5 yrs exp. to work on computer centre project in Docklands.

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DESIGN/PROJECT PLANNER - for expanding company in W. London with good opportunity for career development.

PROJECT CO-ORDINATOR - for Kent based contracting company. For further career move contact us in confidence at: Stirling Executive Personnel, 44 Richmond Road, Kingston, Surrey KT2 9BE Tel: 846 3750

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RECRUITMENT CONSULTANTS

ARCHITECTS

(recently qualified)

We once again require Architects aged in their late 20's to mid 30's to design and run projects from the initial stages through to completion. The areas of work include: commercial, residential, public sector, shopping centres and retail, to domestic. Salaries/packages range from £10,000-£16,000.

For more explicit details please contact: Steve McAlister or Tim Loftus to arrange an initial discussion.

Tel: 01-888 6994
Grosvener Gardens House, 35-37 Grosvener Gardens
Victoria SW1

PROPERTY ARCHITECTURAL ASSISTANT/ARCHITECT ARCHITECTURAL TECHNICIAN

The Property Department at County Hall covers the complete concept of property management and is organised in six Divisions across nine professional disciplines.

Applications are invited for the above posts based in the Design Division which is a multi-disciplined practice of Architects, Mechanical, Electrical and Structural Engineers, Land Surveyors and Landscape Officers with responsibility for the formulation of design policy and its implementation in respect of all services of the County Council, including the Capital Building Programme.

Successful candidates will be expected to meet the following requirements:-

1) Architectural Assistant/Architect

to hold a degree/diploma in architecture and be a competent designer with a sound knowledge of building construction moving towards his/her professional practice examination.

2) Architectural Technician

to have a sound knowledge of building construction and regulations, preferably with HNC Building or equivalent.

Salary: 1) SO1/PO1 £10,669-12,684
2) B3/6 £6,606-10,164

Dependent upon qualification/experience

Hours: FULL TIME

If you are interested in either of the above posts and feel that you could become a useful member of the Property Department, please apply to the Head of Manpower Services at County Hall, Bedford, Tel: Bedford 228288, or for an informal discussion telephone the Design Manager, Mr B Dickinson, at County Hall on Bedford (0234) 228445.

Closing date: 24th October 1986.

The council is an equal opportunity employer, and welcomes applications from members of ethnic minority groups, disabled persons and all other sections of the community.

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APPOINTMENT

RECRUITMENT FOR DESIGN & CONSTRUCTION

Our clients urgently require

ARCHITECTS (JOB RUNNERS or DESIGNERS), ASSISTANTS & TECHNICIANS, INTERIOR DESIGNERS & SPACE PLANNERS, BUILDING SURVEYORS FOR KENT & LONDON, DESIGN ARCHITECTS FOR DOHA

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QUALIFIED ARCHITECTS AND GRADUATE ARCHITECTS

To work in an enthusiastic and rapidly expanding company. Successful applicants will be highly talented and able to take responsibility on varied and interesting projects from inception to completion.

Applications in writing enclosing Curriculum Vitae to: Brian E Wright BA (Hons) BArch RIBA
Director
Simons Design Associates
Moor Road
LINCOLN LN3 4NU

ALEXANDRA PALACE & PARK

Landscape Officer (Qualified)

£8,613-£12,861 Sliding Scale 5, 6, 801, PO1

You will join a busy multi-disciplinary office mid-way through the development of Alexandra Palace and Park. You will be responsible for all aspects of Landscape Architecture, associated with the development. You must have a high level of skill, experience and an interest in both hard landscape and ecological design. The diversity of workload illustrates the character and regional importance of Alexandra Palace and Park, and the position provides an ideal opportunity for a talented landscape architect to continue the scheme through to the opening of the Palace in 1988.

You should ideally be PART IV qualified, with considerable experience.

Haringey is an equal opportunity employer. We welcome applications which will be considered on merit, irrespective of race, marital status, sex or any disability you may have.

Contact: Ann Wilde, Development Team, Alexandra Palace, Wood Green, London N22 4AY.
Closing date - 24th October 1986
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superb experience for a young, creative all-rounder
c.£10,000 + car

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The Division is expanding within one of Britain's most dynamic and successful retail groups. We currently operate 300+ stores in High Streets and out-of-town shopping centres throughout the country. There is an ongoing programme to redevelop and refurbish existing sites, as well as frequent new store openings.

Your job will be to assist in all creative, technical and procedural aspects of building and shopfitting works. Tasks will range from surveys and the preparation of drawings and specifications, through tendering and planning procedures, to site supervision and cost control. Travel is a feature of the work.

Few positions could offer such a rapid or broad gain in experience. Formal qualifications are required.

(eg RIBA pt 1 or HNC Building), plus around 2 years' experience in a related environment.

Excellent salary, benefits and prospects. Please apply with cv, quoting ref. CD778, to: Recruitment Section, Harris House, 76 High Street, Orpington, Kent. Tel: (0689) 75127.

HARRIS QUEENSWAY



BRITISH ARCHITECTURAL LIBRARY

Curator of the Drawings Collection

The Royal Institute of British Architects invites applications for the post of Curator of the British Architectural Library Drawings Collection.

The BAL is the leading British collection for architecture and comprises the Drawings Collection at 21 Portman Square, W1, and the Photographs, Manuscripts, Books and Periodicals Collections at 66 Portland Place, W1.

Developments are now taking place for it to achieve official recognition as the national subject collection. The Curator will be directly responsible to the Director of the BAL, and will be involved in all aspects of the Drawings Collection and its future. The successful candidate must be able to demonstrate a knowledge and understanding of the architectural scene past and present; qualifications, including a degree and several years' relevant experience, should be those needed to ensure the successful development of the Drawings Collection. In collaboration with the other Collections in the BAL, development will on the one hand relate to collecting policies, and on the other to the implementation of present day technological applications in order to provide the architectural profession with all the services which modern innovations make possible. An ability to help achieve a wide basis of financial support for the BAL, and to develop revenue producing activities, would be desirable.

The salary will be on the Institute's Band 6 scale. Benefits include pension scheme, 25 days' holiday for further details apply to the Personnel Officer, Royal Institute of British Architects, 66 Portland Place, London W1N 4AD. Closing date for completed applications: 24 October 1986.

HOLFORD ASSOCIATES require immediately an ARCHITECT

to work on an interesting project in the London Docklands. Applicants should be able to demonstrate proven technical ability and be capable of working on their own initiative.

Please write with CV to Trevor Powell, Holford Associates, Fishmongers Chambers, 110 Upper Thames Street, London EC4R 3TJ

Somerset County Council

AN EQUAL OPPORTUNITIES EMPLOYER

PLANNING DEPARTMENT

County Hall, Taunton

LANDSCAPE ASSISTANT

Scale 5 (£7,920-£8,697 pay award pending)

Applications are invited for this new post in the Environment Group of the Council's Planning Department, which has been created as a direct result of the Department's increased activities in the field of countryside management.

The postholder will assist senior staff in a wide range of tasks including: landscape works; tree planting; woodland and amenity land management; local plan implementation works; and advice/consultancy etc. The duties include: site inspections/surveys; preparation of detailed designs, site plans and contract documentation relating to countryside/landscape matters; and technical assistance in relation to countryside enhancement and conservation.

Applicants should be members of the Landscape Institute and must be qualified to a minimum of the Institute's Part 3 examination or equivalent. A full driving licence is essential. The post carries a casual car user allowance.

Application forms and an information pack can be obtained from the County Planning Officer, Somerset County Council, County Hall, Taunton, Somerset TA1 4DY - Tel: 0823 68407.

Closing Date: 31/10/86

Interviews: 16/11/86

AREA BUILDING SURVEYOR

Here at Taylor Walker we're in the middle of a major development programme covering many of our 700 pubs encompassing London and Essex. This development is a direct result of our energetic and progressive approach and now means we need a young and talented Area Building Surveyor to join our team.

Based at our Head Office in Muswell Hill you will provide a comprehensive advice and technical service with the opportunity for some design input into our redevelopment projects. Your responsibilities will include all matters relating to property, involving the arrangement and supervision of building work

for the maintenance and improvement to our Estate.

You should be HNC, or equivalent, qualified in Building and able to demonstrate strong commercial flair and imagination.

In return we can offer you a salary of £9,500 - £10,000 plus company car as well as the range of benefits offered by a large progressive company.

So if you are ready to broaden your skills and take on the challenge of working with a successful and progressive company then please apply in writing attaching your CV to Fiona Hanan, Personnel Manager, Taylor Walker, 77 Muswell Hill, London N10 3PH.



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ASSISTANT ARCHITECT £12,000
Two opportunities for a young architect to work on a variety of projects in the London Docklands. The successful candidate will be responsible for the design and construction of a new office building. The salary is £12,000 per annum. Applications should be sent to: Carr Montrose, 85/86 College Road, Harrow, Middlesex. Tel: 01-841 4474.

ASSISTANT/ARCHITECT £10,12,000
Two opportunities for a young architect to work on a variety of projects in the London Docklands. The successful candidate will be responsible for the design and construction of a new office building. The salary is £10,12,000 per annum. Applications should be sent to: Carr Montrose, 85/86 College Road, Harrow, Middlesex. Tel: 01-841 4474.

SOUTHAMPTON
Recently passed your HNC? Actively looking for a career position? This is your chance to join a team of experienced architects and designers. You will be responsible for the design and construction of a new office building. The salary is £10,12,000 per annum. Applications should be sent to: Carr Montrose, 85/86 College Road, Harrow, Middlesex. Tel: 01-841 4474.

The Professionals choose us for choice

ARCHITECTURAL ADVANCEMENT
Architectural Advancement is a leading national architectural practice. We are currently seeking experienced architects and designers to join our team. The salary is £10,12,000 per annum. Applications should be sent to: Carr Montrose, 85/86 College Road, Harrow, Middlesex. Tel: 01-841 4474.

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ARCHITECTS AND TECHNICIANS

With experience to work on a wide variety of projects in a busy and progressive office. Excellent terms of employment including visit abroad each year.

Please write giving curriculum vitae to: Douglas Smith Stimson Partnership, 61 Regent Road, Leicester.

BDP GUILDFORD

We have recently moved to new offices within the Town Centre and are anxious to recruit a variety of staff in recognition of an expanding and interesting portfolio of projects.

SENIOR ARCHITECTS/ASSOCIATES with experience of managing major commercial schemes and seeking opportunities for leadership and advancement in this field. Candidates should have at least eight years post graduate experience, with a sound understanding of contract administration.

ARCHITECTS/TECHNICIANS to join teams working on a variety of private and public sector projects at various stages of development. Applicants should have between 2 and 6 years' experience, and sound technical knowledge and a commitment to quality in design and technical detailing. Attractive salaries will be negotiated together with an appropriate package of other benefits.

Please write enclosing a CV and some examples of recent work to: P T Remington RIBA, Building Design Partnership, Leys House, 86-88 Woodbridge Road, Guildford GU1 4EX



architects and planning consultants

Architects and Architectural Assistants

Applications are invited from architects and architectural assistants to work on a variety of interesting projects.

ARCHITECTS must be first class designers with good presentation skills and have a minimum of three years post qualification experience.

ARCHITECTURAL ASSISTANTS should have a minimum of ten years experience in an architect's office and be capable of a high standard of draughtsmanship combined with sound construction knowledge.

Good salaries linked with other attractive benefits are offered with the opportunity to work in a first class studio environment.

Apply in writing marked 'Confidential' enclosing C.V. to: Brian Rickard Esq., APP Brighton, Pelham House, 28 Pelham Square, Brighton, E. Sussex BN1 4ET.

WINDSOR GOVERNMENT LIMITED
46-48 London Road, Twickenham, Middlesex TW1 3RG
Telephone 01-891 0891

We are employment consultants who specialise in the placement of architectural, permanent and contract personnel.
We have vacancies for Assistants/Technicians and Architects in London and Home Counties.
For further details please phone Martin Harrison or Karen Spencer.

Tripe and Wakeham Partnership

require
A SENIOR ARCHITECT
also
ARCHITECTS
SENIOR TECHNICIANS

to participate on a range of interesting projects involving retail, industrial and office developments.
Salaries by negotiation.
Please apply in writing with your full CV to:
S J Snook
Tripe & Wakeham Partnership
16 Fitzhering Street
London W1H 0ER

THE LONDON BOROUGH OF HARROW

Department of Architecture and Planning
The Architects Division is currently working on a variety of interesting projects of varying sizes including new build, modernisations, extensions and adaptations, and now requires four new people to join the team.

Senior Building Surveyor

£13,283 to £14,381 inc. London Weighting
You must hold a suitable professional qualification and have had several years practical experience. You will be required to work on a wide variety of projects ranging from programmed repairs to major capital works, carrying them through from feasibility to final account.

Architectural/Building Surveying Assistant

£7,344 to £13,038 inc. London Weighting
You will work along side qualified Architects and Building Surveyors, covering all aspects of the Council's extensive building programme. Initially, you will be mainly involved in adaptations to buildings to make them suitable for handicapped people. Ideally, applications should be RIBA/RICS Part I or MBAT standard.

Architectural Technician/Student

£7,344 to £13,038 inc. London Weighting
You will work in one of the architectural groups assisting qualified staff on the larger projects, or acting as project officer for smaller schemes. Applicants should have a good working knowledge of building construction and contract procedures, and ideally, should be RIBA Part I or MBAT standard.

Senior Clerk of Works

£11,307 to £12,008 inc. London Weighting
We are currently undertaking a considerable building programme of both new and existing housing modernisation schemes. We need, therefore, to increase our Clerk of Works team to meet the demands of our varied building programme and to ensure that adequate site inspection is maintained.

Applicants should ideally be members of the Institute of Clerk of Works and have considerable experience of all types of building works and trades.

Starting salaries will be commensurate with experience and/or professional qualifications. Where appropriate, day release facilities will be available to enable you to pursue studies in order to achieve a full professional qualification.

In addition to a generous holiday entitlement, flexitime and removal expenses where appropriate, Harrow offers a location with good sports and social facilities, is within easy reach of Central London, yet close to the countryside.

The London Borough of Harrow is actively pursuing a policy of equal opportunities, and welcomes applicants from minority and disadvantaged groups. For an application form and job description please contact the Staffing Office, Department of Architecture and Planning, PO Box 38, Civic Centre, Station Road, Harrow, Middlesex HA1 2XA or telephone 01 863 6811 ext 257D.

The closing date for applications is two weeks after the date of the publication.

Harrow Architecture
an equal opportunity employer

TONY HUDSON ASSOCIATES, WINDSOR

Require a young qualified architect and technician with minimum of 4 years' experience, to join us in our new Windsor offices to work in new and interesting contracts. Initiative and enthusiasm essential. Salary negotiable.
31 Sheet Street, Windsor, SL4 1BY
Tel: Windsor 889886

SANT ASSOCIATES

require an
ARCHITECTURAL TECHNICIAN
to work on a wide variety of new-build projects in the friendly atmosphere of a small design studio. Applicants should have at least 3 years experience.
Reply to:
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Sant Associates
Princel House, Dedham, Colchester CO7 6HD

GROVON HEALTH AUTHORITY

SENIOR BUILDING OFFICER
We are looking for a person who wishes to expand their knowledge and gain valuable experience in a wide range of Building Estate maintenance and design.
The duties will be involved in a full range of services including maintenance and refurbishment works, supervision of contract labour and management of a hospital labour force of 30 craftsmen and labourers who are working under a National Incentive Bonus Scheme.
You should have the experience and ability to inspect and identify building defects, specify the correct remedy, provide minor estimates and supervise work in progress.
H.N.C. in Building or other acceptable qualifications are essential.
Salary: £9,964 to £11,408 per annum inclusive plus Incentive Bonus of 15% maximum.
Assistance with temporary accommodation and removal expenses may be given.
For further details contact Mr. A. Gibbs telephone 01-484 6999 extension 4006.
Job description and application form from Unit Personnel Department, Mayday Hospital, Mayday Road, Thornton Heath, Surrey SM7 7YS, telephone 01-884 6999 extension 3536.

The Polytechnic of North London

Reference number L53/N re-advertisement

The Polytechnic of North London is an Equal Opportunities Employer and therefore particularly welcomes applications from Women, Ethnic Minorities and the Disabled.

Temporary Half Time LII in Continuing Professional Development

Responsible for teaching Diploma level students of architecture during their final period of study before entering the profession. The post also involves the structuring of the Department's work in Continuing Professional Development.

Successful candidates will be required to attend for 15 hours per week on a programme agreed by the Department.
Salary: Pro Rate of £9,705-£14,766 (inclusive of London Allowance)

Application forms and further details are available from The Personnel Office, The Polytechnic of North London, Holloway Road, London N7 8DB. Telephone 099 9913 (24 hour answerphone service).
Closing date for the receipt of applications is 14 days from the appearance of this advertisement.

Architectural Division ARCHITECTURAL ASSISTANT

(Interior Designer)
£7,344-£10,902 p.a. inclusive

An interior designer (architectural assistant) is required to carry out duties in connection with interior design of new and existing buildings for all types of Council projects, schools, Elderly Persons' Sheltered Housing, Social Services Buildings, municipal buildings, including some listed buildings of historical interest.

Applicants should be engaged in or have completed a course of study which will lead to a qualification as an Interior Designer.

Commanding salary will be in accordance with qualifications and experience.

Post entry training facilities where appropriate.
Closing Date: 22.10.86 Ref: 880AR

Application forms obtainable from the Personnel Office, Room A/204 Town Hall Annex, New Broadway, Ealing W5 2BY. Tel 01-840 1885 (24 hour service). Please quote appropriate reference.

Ealing's new Council welcomes applications regardless of sex, race, ethnic origin, sexual orientation, disability or responsibility for dependants.

Ealing
London Borough

Walbrook

URGENTLY REQUIRED
for numerous temporary and Permanent vacancies in
**ARCHITECTS TECHNICIANS ASSISTANTS
AND INTERIOR DESIGNERS**
Please contact in confidence David Paterson or Noel McKeever, 68 Red Lion Street, London WC1R 4NA.
Tel: 01-405 8787

WELLIN & PARTNER

ARCHITECTURAL TECHNICIAN
required to help deal with ever increasing workload. Applicants must be self motivated and experienced in aspects of architectural work including site surveys, site plans and working drawings.
Please reply in writing enclosing a full C.V. to:
J K Edge, Wellin & Partner
Building Surveying Services, 114 Oxford Road
High Wycombe, Bucks HP11 9DN

ON THE SOUTH COAST

Borough of Havant

PLANNER (Career Grade)

Salary Scale 3-SO1 £6,606-£11,271

This post within a busy development control group offers excellent opportunity to join a progressive team. The post is suitable for graduates in planning/civic design or related disciplines. In addition some experience in Development Control would help. Enthusiasm and initiative are essential qualities as is the ability to cope with a heavy workload under pressure.

Benefit package includes car allowance and relocation assistance where appropriate. Housing may be available.

Disabled persons may apply as appropriate.

Application forms and further particulars available to:
Director of Technical Services
Borough of Havant, Civic Offices
Civic Centre, Havant
Hants PO9 2AX
Telephone: Havant 474174 Ext. 174
Closing date: 27th October 1986.

Planning & Development

Architectural Division

GROUP LEADER PRINCIPAL LANDSCAPE ARCHITECT

PO 4 £17,022 — £18,171

Job grading currently under review

An experienced Landscape Architect committed to improving the landscape of the inner city and to working with the community on complex and challenging urban schemes, required to lead the Landscape Group. You will be a member of the Architectural Division Management Group and will be responsible for developing, monitoring and assessing the Landscape Group and you will also represent the Division Committee meetings. You should have a sound knowledge of landscape design, construction and contract administration. Currently the Architectural Division consists of six architectural groups, one landscape group, quantity surveyors and clerical works. The current landscape establishment is eight posts. The group is likely to expand in the near future to 14, giving scope for personal development.

The group handles a wide variety of projects including environmental improvement, new build and rehabilitation, housing landscapes, urban programme schemes, new parks and improvements to existing parks, canals, town schemes and advising other council departments and community organisations on landscape matters.

The Architectural Division particularly welcomes applications from black and ethnic minorities, women, lesbians and gay men and people with disabilities. Applicants are considered on the basis of their relevant experience, abilities and qualifications. Previous applicants need not apply.

Job share applications will be welcomed with or without a partner. Application forms are available from Recruitment Office, Town Hall, Main Street, E3 1EA or telephone 01-866 5331 (24 hour answering service) quoting reference RM383/BD.

Closing date: 24th October 1986.
The Council intends to decentralise its services, therefore the duties, hours of work or location of this post may be subject to change.

HACKNEY COUNCIL
Working for local people
We positively welcome applications from black people, disabled people and women where they are under-represented in particular jobs.

ALAN HAZELWOOD ARCHITECTS

require a
YOUNG ARCHITECT
with minimum of 3 years experience and a
TECHNICIAN
capable of preparing production information with minimum supervision to join a small practice with varied workload including housing, commercial, specialist projects for the handicapped and renovation work to listed buildings.
Please write with C.V. to:
Alan Hazelwood Architects
25 HITCHIN STREET, HITCHIN, BEDS SG11 6AX

B H FOUNTAIN MANAGERS ASSOCIATES

2 St Johns Road, Tunbridge Wells
Kent TN4 9NP
require an energetic, enthusiastic, experienced
**ASSISTANT ARCHITECT/
ARCHITECTURAL ASSISTANT**
capable of the fast efficient production of working drawings and specifications.
Telephone Tunbridge Wells 07041 or 01525

TOWER HAMLETS HEALTH AUTHORITY, DISTRICT CENTRAL SERVICES
The Department of a busy London Teaching District, based at Whitechapel, has a small Project Section which is engaged in the design and management of building and engineering capital projects.

PROJECTS TEAM LEADER
(WO3) Salary £13,189-C £15,443 (inclusive of London Weighting)
To advise Projects Team Leader on mechanical and electrical engineering aspects of schemes.

ENGINEER
(WO1) Salary £10,943-C £12,701 (inclusive of London Weighting)
To advise Projects Team Leader on mechanical and electrical engineering aspects of schemes.

ARCHITECTURAL YEAR OUT STUDENT
(WO3) Salary £4,849-£5,846 (inclusive of London Weighting)
Qualification: RIBA Part I, Duration 6-18 months. Duties will involve gaining experience in measuring, surveying, design and presentation, drawings and contract management. Hours of work for each post is 37 per week.

Further details from Mr. Shorrocks or Mr. Hall on 01-377 7741.
Closing date: 14th November 1986

METROPOLITAN BOROUGH OF SEFTON

PLANNING DEPARTMENT

ASSISTANT PLANNER (URBAN DESIGN)

(Scale 4/SO1: £7,311-£11,271)

This post presents an ideal career development opportunity for a planner/architect wishing to gain experience in the urban design aspects of town planning.

Sefton is a Metropolitan district which provides an unusually varied planning workload. Stretching from Bootle in the South to Southport in the North the Borough includes inner urban areas, areas of suburban growth, an extensive Green Belt, coastal and countryside features of outstanding value and important conservation areas.

The post is located in a busy section of the Planning Department responsible for statutory local plans, town centre studies, design briefs and a variety of local policy matters. There is an important component of this workload which requires skills in urban design and visual presentation. The post is for an assistant planner who can meet these special requirements whilst being able to contribute to the other aspects of the section's work.

Candidates should be qualified to degree level in planning, architecture or urban design, or a combination of these.

Car allowance, removal expenses and lodging allowance are payable in approved cases.

Application forms and further details can be obtained from the Borough Planning Officer, Vermont House, 378 Stanley Road, Bootle, Merseyside L20 3RY. Telephone 081 833 6011 Ext 3586.
Closing Date: 27 October 1986

1786 1786 1986

Two centuries strong and building

Architect and Technicians Uxbridge

The design department of Lovell Construction Services Limited is based in Uxbridge and provides a comprehensive architectural and engineering design service to the Lovell Group in the full range of housing, commercial and industrial design and construction projects. We currently require the following staff:-

Architect — Housing

Applications are invited from qualified architects aged 30 to 40 who are able to show proven aptitude, ability and flair in innovative housing and site layout design. The successful applicant will handle all stages of private housing development, partnership housing and retirement homes schemes. If you are self motivated and fast you have the ability to motivate others we would like to hear from you.

Architectural Technicians

Applications are invited from young people who have completed their training, gained a variety of experience, and achieved HNC/Dip or equivalent. Successful applicants will have the opportunity to gain further experience in a range of design and detailing work from housing through to industrial and commercial projects.

We will offer a realistic salary with excellent employment conditions including pension/life assurance scheme.

Please apply with brief career and personal details to: Personnel Manager, Lovell Group, Lovell House, 818 Chiswick High Road, London W4 8RX, or telephone for an application form on 01-747 3311.

Lovell

THE CHARTER PARTNERSHIP LIMITED

We are a very busy and expanding practice requiring additional staff at intermediate and senior levels.

An opportunity to work on varied numerous and interesting projects in a pleasant and informal environment is offered.

Applications in writing or by telephone from Architects and Technicians should be made to:-

The Company Secretary,
15 St. Mary's House, Cardington Road,
Bedford MK42 0BP.
Telephone: 0234 42851.

GREAT OPPORTUNITIES

We require the services of
SENIOR PROJECT ARCHITECTS
who have had at least 5 years recent UK experience and who are capable of administering the construction of multi-million pound commercial developments.

Apply in writing with CV to:
The Helpem Partnership
Leonard House
9/15 Leonard Street
London EC2A 4HP

INTERNATIONAL DEVELOPMENT CONSULTANTS

require experienced

SENIOR TECHNICIAN INTERIOR DESIGNER

conversant with

- Building & land levelling
- Quick draughting techniques
- Perspective presentation
- Specification writing and detailing
- Letting and controlling contracts
- Measuring for valuations

Salary negotiable with usual company benefits.
Curriculum Vitae to—
Demand Crews FRIBA

CREWS & Co.

ARCHITECTS SURVEYORS
DEVELOPMENT CONSULTANTS

15 BERKELEY STREET
MAYFAIR
LONDON W1X 5AE
TELEPHONE: 01 629 0577

Design & Construct Co-ordinator

A Design and Construct Co-ordinator is required in a progressive department specialising in commercial and industrial developments for the private sector.

This appointment will suit a man or woman with technical background, commercial flair, sound construction knowledge and pleasant personality. Preference will be given to candidates with previous co-ordination/project management experience. The candidate will be responsible for:

- * Arranging sketch proposals/schematic drawings and surveys required for planning permission and budget prices.

- * Co-ordination of internal departments (taking-off, buying, estimating, planning, etc.) involved in the preparation of tender and other pre-contract activities.

- * Co-ordination of external design Consultants employed for both tender and post-contract design.

- * Management of projects in progress ensuring a smooth exchange of information between design and construction teams.

- * Maintaining a close post-contract relationship with Clients. Salary is negotiable depending upon age and experience.

Please write giving details of career and salary progression to: Personnel Department, Rush & Tompkins Group Plc, Marlborough House, Station Road, Bideford, Devon DA11 6BP. Tel: 01-300 3388.

R+T
CONSTRUCTION

Renton Howard Wood Levin Partnership

RHWL

77 Endes Street
London WC2H 9AJ

A young

ARCHITECT

is required to join a team working on a high spec new office headquarters building.

Please apply with C.V. marking your application "Offices" to:

Jenette Payne at the above address.

PICK EVERARD KEAY & GIMSON

require an

ARCHITECTURAL TECHNICIAN

with at least 3 years commercial experience to work in their small branch office in

COVENT GARDEN

to take responsibility on all aspects of fast moving retail projects throughout the U.K.
Please write with C.V. to:
Pick Everard Keay & Gimson
13/13 Henrietta Street
Covent Garden, London WC2E 8HL

DIRECT WORKS DEPARTMENT

The Department is re-organising its Technical and Consultancy Division because of increasing workload and Council commitment to decentralised services with maximum tenant/user participation. Fifteen local teams of Building Surveyors will be established. The Division is responsible for managing the Building maintenance and refurbishment programme for the property stock of 88,000 houses and 1,800 public buildings. The current programme is valued in excess of £20M.

If you want a management opportunity demanding commitment to providing a technical service which identifies, specifies, commissions and supervises building maintenance and programme refurbishment work, with commitment to full user participation then we want to hear from you. We need Professional Qualified Surveyors, Chartered Builders or Architects for the following:

Area Management Surveyor dwo1

3 posts
PO3 £13,663-£14,882

Minimum 3 years' post qualification experience of managing a team of surveying staff.

To lead, direct and motivate teams of building surveyors within a series of defined locations, incorporating one third of the Council's property stock. This team will provide a comprehensive technical service to determine the condition of the property stock. You will develop, formulate and implement Divisional policies and standard practices, including internal job training and presentation of overall staff budget information. You will be responsible for collection and presentation of Annual Budgets for building maintenance works on a Committee basis.

Programme Surveyor and Special Projects Co-ordinator dwo2

PO3 £13,663-£14,882

Minimum 3 years' post qualification experience of managing a team of surveying staff.

To lead and direct a team which will formulate and implement the short and long term programme strategies, including development of standard practices and procedures. You will also develop and implement a special project on building defects, the remedy of which may have a wider standard practice application. And you will develop the computerised capital programme monitoring system for reporting progress to Council Committees and the Management Team.

Principal Group Surveyors dwo3

16 posts
PO1/2 £11,662-£13,663

Minimum 1 year post qualification experience of managing a team of building surveyors.

To lead and direct teams of building surveyors within defined locations incorporating one fifth of the Council's property stock. You will be responsible for detailed surveying, specification and tendering for works on all types of buildings for major/minor repairs, improvements and refurbishments. And you will provide a localised comprehensive technical building service for the team, building user and tenants.

Principal Quantity Surveyor dwo4

PO3 £13,663-£14,882

Minimum 3 years' post qualification experience of managing a team of surveying staff.

To lead and direct a team of quantity surveyors within the Division dealing with all aspects of pre and post contract duties including preparation of contract documents, agreement of interim valuations and final accounts, and settlement of claims. Good working knowledge of building contracts is essential as is ability to motivate staff.

Group Leader Quantity Surveyors

dwo5 8 posts
PO1/2 £11,662-£13,663

Minimum 1 years' experience of managing a team of quantity surveyors. To lead and direct teams of quantity surveyors within defined geographical locations incorporating one third of the City Council's property stock, and responsible for the activities of a group of surveyors and all aspects of pre and post contract duties including preparation of contract documents, agreement and interim valuations, and final accounts and settlement of claims.

The above posts carry a casual user allowance.
All the above posts are a full-time job share.

Application forms from The City of Manchester Direct Works Department, Personnel Section, PO Box 21, Salisbury House, Gmily Row, Manchester M80 1LD. Tel. 061 226 3456 Ext. 280. Closing date 24th October, 1986.

The City Council operates a Union Membership Agreement under which a new employee is required to become a member of a recognised Trade Union.

Manchester City Council is an Equal Opportunity Employer, and we promote equal opportunities for all women and men, regardless of their race, ethnic or national origin, disability, age up to 65, or sexual orientation for dependants.

MANCHESTER
City Council
Defending Jobs - Improving Services

ARCHITECT
with 9-13 years post qualification experience required by busy multi-disciplined practice.
Wide range of interesting projects (some on RUCAPS CAD), including research, commercial, industrial and residential building and refurbishment.
Write with C.V. to:-
PPI Consultants
Architects & Consulting Engineers
35 St Johns Road
Tunbridge Wells, Kent TN11 9NT

Michael Lyell Associates

PROJECT ARCHITECTS ASSISTANTS TECHNICIANS

required to work on interesting and rewarding projects.
Positions available in London and at the Walton on Thames group office incorporating the John Deal Partnership.

Applicants must have a minimum of 8 years office experience and should apply in writing including full CV to Martin Gorton, 16 Yeomans Row, London SW3 2AJ.

ISLE OF WIGHT HEALTH AUTHORITY

District Building Projects Officer

W.O. Scale 2
Salary Scale: £10,742-£13,328 per annum

An experienced Architectural Assistant for work in the projects section of the District Estates Department.
Outlets include the design, estimating, preparation of specifications and contract documentation and the supervision of contractors. Applicants should have some experience in a similar design environment and thorough knowledge of building contract procedures. Qualifications required: - HNC (Building) or equivalent with preferred membership of BIA or RICS (Building Surveying) Part 2 or RIBA Part 2. Informal enquiries to Mr. C. Eccleston - tel (0853) 828011 ext. 226.

Application form and job description obtainable from the District Personnel Department OHO, Whitworth, Sandy Lane, Newport 10W
CLOSING DATE FOR COMPLETED APPLICATIONS:
24th October 1988.

Fairclough Homes

REQUIRE

ARCHITECTURAL TECHNICIAN

Fairclough Homes Limited, one of Britain's leading house building companies are currently seeking to recruit Architectural Technicians based at Lytham-St Annes.

Successful applicants will form part of a busy team working on a rapidly expanding programme and should have the appropriate experience in all aspects of housing development.

Excellent salary package offered and many opportunities for advancement.

Apply in writing with C.V. to:

R.D. Long
Fairclough Homes Ltd
Midland Bank Chambers
8 Clifton Square
Lytham-St Annes
FY8 5JB



app london

architects and planning consultants

Architects and Architectural Assistants

Applications are invited from architects and architectural assistants to work on a variety of interesting projects.

ARCHITECTS must be first class designers with good presentation skills and have a minimum of three years post qualification experience.

ARCHITECTURAL ASSISTANTS should have a minimum of ten years experience in an architect's office and be capable of a high standard of draughtsmanship combined with sound constructional knowledge.
Good salaries linked with other attractive benefits are offered with the opportunity to work in a first class studio environment.

Apply in writing marked 'Confidential' enclosing C.V. to
Gordon Roberts Esq., APP London,
38 Park Street, London W1Y 3PF.

stirling

RECRUITMENT CONSULTANTS

DUE TO DEMAND WE HAVE NOW OPENED ANOTHER STIRLING SUCCESS IN BASINGSTOKE

Old you know that more and more companies are moving from the City to the country, this means that there is an even bigger demand for your Architectural and Interior Design people.
As Stirling we believe wherever our clients move, we move too.
You can now contact us at:-
8A New Street, Basingstoke, Hants (GU24) 47679

IF YOU WANT A QUIET, DULL, EASY TIME, DON'T BOTHER TO APPLY TO US

We are looking for lively, cheerful, non-smoking, hard working and athletic Architects and Technicians to join this very busy thriving practice which has full RUCAP CAD back-up. At the moment our sports and social activities are being heavily curtailed due to pressure of work.

THIS CANNOT BE ALLOWED TO CONTINUE!

If you can help please phone Robert Davies,
John West Associates - Staines 59211

BUILDING SURVEYOR

We require a buildingsurveyor to deal with all aspects of the maintenance, alteration and refurbishment work arising from our extensive portfolio of industrial and commercial properties.

Applicants must be prepared to travel and to work without supervision.

Qualifications preferred but not essential.
Attractive salary by arrangement plus company car.

Applications in writing with CV to:
HLS Dibley MA FRCS
Property Security Investment Trust plc
Fetcham Park House, Lower Road
Fetcham, Surrey KT22 9HD

ALAN JOHNSON & ASSOCIATES urgently require

4 ASSISTANTS/ TECHNICIANS

with solid proven experience to help with expanding retail and commercial workload.
Top salaries for top people.
Apply in writing with full C.V. to:-
Hilary Worsley
Practice Secretary
Alan Johnson & Associates
1 Queen Victoria Road
Coventry CV1 3JS



RUSKIN HOMES and BEAUMONT HEALTHCARE require a TECHNICAL MANAGER/ CO-ORDINATOR

The Companies are leading subsidiaries of an expanding public company actively engaged in the provision of housing and continuing healthcare for elderly people.

Due to the rapid expansion in both fields we are seeking a Technical Manager/Co-ordinator to co-ordinate all the technical activities of the Companies from the initial land investigation through to building completion, working with external professional teams and liaising direct with the MDs.

The successful candidate must possess a good all-round knowledge of all aspects of housing development and is likely to have either an architectural background, or may already be working for a housing company and wish to advance into Management.
Enthusiasm, self-motivation and good communication skills are considered essential.

A unique opportunity to move into an exciting, rapidly expanding new field.

Excellent prospects, company car and attractive remuneration package will be offered to the right candidate.

Please write in the first instance with full CV to either:
D.G. COOMBS M.N. SANDERSON
RUSKIN HOMES BEAUMONT HEALTHCARE

1 LONSDALE GARDENS, TUNBRIDGE WELLS, KENT TN11 1NU
Tel: Tunbridge Wells (0852) 41688/7

EXETER TRUST COMPANIES

ARCHITECT for HIGH QUALITY HOUSING DEVELOPER

We require an experienced and talented Archt with proven design ability, presentation skills, good constructional knowledge to work on interesting new and existing housing projects.
Salary £13,000-£16,000 depending upon experience, plus usual benefits, etc.

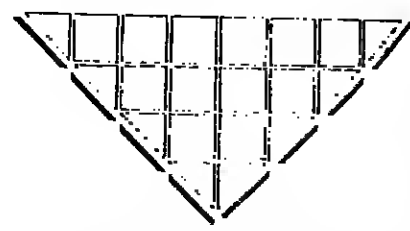
Write enclosing CV to:-

Shaun Purdy
Solai Properties Ltd
8th Floor, York House, Empire Way
Wembley, middlex HA9 0PA
or telephone 01-900 1344

BUILDING DESIGN

The Top Newspaper for the
Recruitment of Building Professionals

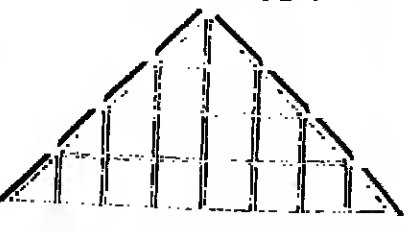
ARCHITECTS



STANLEY BRAGG PARTNERSHIP

We have vacancies for architects and technicians of various grades who can demonstrate their ability and enthusiasm work on a varied and expanding workload in the attractive environment of our new premises.
Apply to - Mr A G W Bussell
Abbeygate One & Whitwell Rd Colchester Essex CO2 2ZF
Telephone 0206 571371

COLCHESTER



TECHNICIANS

Shopfit/Design Specialist

c. £11,000 pa.

Sketchley has a vacancy for a Shopfit/Design Specialist in its Estates Department.

Applicants must be capable of not only implementing practical shop design concepts but also of carrying out innovative research and development. In addition applicants will be expected to be capable of carrying out site surveys, preparing drawings, obtaining quotations for shopfit, supervising work in hand and generally administering the programme of shopfitting affecting approximately 470 shops.

We offer a comprehensive range of benefits including company car, life assurance, contributory pension scheme and relocation expenses where appropriate.

Please write in confidence with CV giving full career details and present remuneration to: Mr. W.G. Evans, FRICS, Sketchley PLC, UK Consumer Division, PO Box 7, Rugby CV21 3NE.



SENIOR ARCHITECTURAL ASSISTANT/TECHNICIAN

required for busy practice with varied workload. Good salary together with fringe benefits.

Please write with cv to:

R J Nisla
Aubrey Williams & Partners, Architects & Surveyors
Brecon House, The Ring, Brecknell RG12 1AY
Tel: 0344 421957

GOOD DESIGN ARCHITECT?



2 ARCHITECTS WANTED to join our team of 10. Both jobs offer involvement at all stages. Excellent prospects and lots of responsibility.

EXPERIENCED PROJECT ARCHITECT (28-35) with good organizational and contact skills and a wide experience of medium sized projects.

ENTHUSIASTIC DESIGN ARCHITECT with presentation skills and good all round experience to work on a great variety of interesting projects.

Competitive salaries. Interested? Write immediately with your details to:

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Colwyn Foulkes & Partners
229 Kensington High Street London W8
or call Steve Rimmer at Adrem on 01 938 3433

EALING W5 Sandra Norman require

PART II & III ARCHITECTS

for a wide variety of work. CAD training also possible. Progressive practice offering good career prospects.

Please telephone
Keith Norman or Richard Sanders on 01-840 1188
or at home on 0990 21351 or 01-940 5121
38 The Mall, Ealing W5

UNIVERSITY OF BATH

SCHOOL OF ARCHITECTURE AND BUILDING ENGINEERING LECTURER

The School is committed to teaching architectural and engineering students in the first years to encourage collaborative projects at other times. Applications are invited from architects who are enthusiastic about this idea and interested in developing the teaching of architectural design and its technological implications to undergraduates. The lecturer would take part in studio teaching and be responsible for a series of lectures; the candidate's interest should preferably be in the relation of design and construction both in terms of current practice and historical development. It is also hoped that the lecturer will pursue a topic of research and contribute to his chosen field through publication.

The salary is within the range of £8000-£15700 per annum. Application forms and further particulars can be obtained from the Personnel Officer, University of Bath, Bath BA2 7AY, quoting reference 84/164.

Closing date for applications: 7th November 1988.

Architectural Assistant

Salary Range £11,799 - £13,600

The AA is not only the world's leading motoring organisation - it is also a major name in travel, insurance and retailing. That position has meant the development of a considerable property portfolio, in both industrial and commercial areas.

We now have an estate that comprises freehold and leasehold properties of all ages, sizes and types including offices, transport depots, retail outlets, training and residential accommodation.

Your work, therefore, will be uniquely varied, within a highly professional environment at Head Office in Basingstoke. You'll have the prospect of a developing career within the department as your experience widens and your skills develop.

You'll be involved in detailed site surveys, submission of application for Planning and Building Regulation approval, assist in preparing a wide range of tender and contract documents, as well as supervision of work on site. With an HNC in construction (or similar qualification), you'll have over 5 years' relevant experience and be studying for MSAAT.

Competitive salary levels are matched by first-rate benefits. Including a comprehensive relocation package where appropriate. If your experience matches these responsibilities, please either send your C.V. or telephone/write for an application form and more information to Mrs. K. Bowman, Personnel Officer at the address below. Tel: (0256) 492971.



THE AUTOMOBILE ASSOCIATION, FAULKNER HOUSE, BASINGSTOKE, HAMPSHIRE RG21 2EA.

It's great to know you belong.

ARCHITECTURAL ASSISTANT/TECHNICIAN
required for busy practice with varied workload. Good salary together with fringe benefits.
Please write with cv to:
R J Nisla
Aubrey Williams & Partners, Architects & Surveyors
Brecon House, The Ring, Brecknell RG12 1AY
Tel: 0344 421957

recently qualified Architect or Part II Graduate

minimum 3 years experience, excellent career prospects

Apply to:
Joanna Bowman-Powell
Riley & Glenfield
Chartered Architects
4 Raymond Buildings
Grey's Inn, London WC1R 5BP
Tel: 01-948 7388

Derrick Wade & Waters urgently require

ARCHITECT & ARCHITECTURAL ASSISTANT/TECHNICIAN

to work in their Harlow office, on an expanding and varied workload. Our multi disciplinary office is pleasantly located near Harlow with good access to M11/M25.

Competitive salaries and conditions are offered including the provision of a company car.

Apply in writing with C.V. to:-
CIR Abbott RIBA,
Derrick Wade & Waters
The Old Bakery, High Wyth
Harlow, Essex CM8 1DH



Architects, Planners, Interior
and Graphic Designers

PRC is a young, progressive and rapidly expanding practice and we urgently require capable people for the following positions:

ASSOCIATE LEVEL

Experienced and practical architect who is already an associate or at senior project level.

PROJECT ARCHITECTS, TECHNICIANS AND INTERIOR DESIGNERS

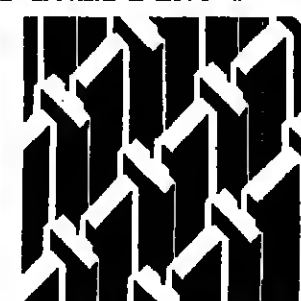
required at all levels.

SITE/CONTRACTS ARCHITECT

with several contracts experience.
Above average salaries for the right people with good prospects for promotion

Write with CV to:

PRC PARTNERSHIP LTD
Clarendon House, 22-24 Clarendon Road
Surrey, Surrey KT9 4QU
or call Jane Thomson on 01-398 5188



ADREM RECRUITMENT LTD
Telephone 01-938 3433



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ARCHITECTS
LANDSCAPE ARCHITECTS
10 ARKLEY STREET
BATH BA2 1BQ
TEL: (0800) 80000 & 04000

Architect and Graduate Architect

with good design, technical and presentation skills with preferably site and contract experience to work in a friendly, well equipped city centre studio overlooking the River Avon.

Apply in writing with C.V.

HAMPSHIRE



PAUL JONES ARCHITECTS are seeking

2 ARCHITECTS

Salary circa £11,800

We require two enthusiastic, self motivated, qualified Architects with a minimum of four years office experience to work on varied and interesting Residential and Commercial projects in our new purpose built offices.

Contact: Mandy Napleton esq
Farnham (0329) 232007
Wellington House
55 Waterlode Gardens
Farnham, Hampshire PO18 8SD

Kenzie Lovell Partnership Require dynamic Architects/Assistants

CURRENT expansion in the City has led to great opportunities and a variety of challenging commercial projects.

In new premises we are creating a progressive and enjoyable working environment.

FAST career development is assured for self motivated and ambitious Architects and Senior Assistants.

EXCELLENT salaries are available for men and women to the right calibre.

RING David Cole-Adams or Gery Blinmore to arrange a meeting.
113 Southwark Street, London SE1. Tel. 938 8201

Somerset County Council AN EQUAL OPPORTUNITIES EMPLOYER

ARCHITECTS DEPARTMENT BUILDING SURVEYOR (TWO POSTS)

S.O.1 £10,888-£11,271

Two experienced Building Surveyors are required to join existing area teams at offices in Taunton and Street.

Duties of the posts will cover the whole range of Building Surveying work, including major planned maintenance, property survey and assessment of priorities, day to day and minor improvement works.

The County Council has a progressive programme of property care and offers good opportunities for gaining valuable experience in all areas of the profession.

Applicants should hold at least an HNC in Building and preferably be members of the CIOB or RICS. They will need to have a positive approach with experience of large scale maintenance covering all types of property, and be able to make a significant contribution to a very busy section.

Job description and application forms are obtainable from the County Architect, County Hall, Taunton, Somerset. (Tel: Taunton (0823) 73481 Ext. 6388).
Closing Date: Friday, 31st October 1988.

EPHING FOREST DISTRICT COUNCIL District Engineer & Surveyor's Department

Architectural Assistant

Salary Grade Scale 5/8 £8,724-£10,487 per annum

Inclusive plus benefits listed below.

Applications are invited for the above post in the Design Division of the Department based at Loughton. The successful candidate will be required to undertake responsibilities in the design, and administration of building contracts. Applicants should be suitably qualified and have practical drawing office and on site experience.

The drawing office, with a friendly team of existing staff, is modern and the offices are situated in a pleasant town adjacent to Epping Forest.

Staff Benefits include:

- a) Housing Accommodation if required;
- b) Relocation expenses scheme up to a maximum of £2,000;
- c) Essential user car allowance (not exceeding 1450cc); or
- d) Attractive, all inclusive, car leasing scheme;
- e) Commuter allowance scheme for staff living more than 25 miles away.

Application form and Job Description may be obtained from the District Personnel Officer, Epping Forest District Council, 323 High Street, Epping, Essex CM15 4BZ. Tel: Epping 77344 Extn: 2101.

Please quote Ref: ES/33
Closing date: 21st October 1988

Epping Forest District Council

DAVID CLARKE ASSOCIATES
London W1

Specialists in solar architecture and restoration of listed buildings require recently Qualified or Part II Graduate, to work on conversion of listed building to a country house hotel.

Telephone David Clarke or Simon Foxell
01-636 7172.

ARCHITECT

A young qualified architect is urgently required to join a small section specialising in housing within a multi-discipline practice. Projects range from large 'one off' houses to sites for several small sites. The successful applicant must have fair and imaginative design skills to help further our work in this specialist field. Experience is not essential and recently qualified applicants will be considered.

Please write or telephone for an appointment to:-

Mr R J Tattersall, Administrator
John Spratley and Partners
St Edmund House
West St Helena Street
Abingdon, Oxfordshire OX14 5BW
Telephone: Abingdon (0235) 22205

THE STILLMAN EASTWICK FIELD PARTNERSHIP
We are looking for
YOUNG ARCHITECTS AND ASSISTANTS

to work in our small, friendly, award-winning practice on medium-sized public sector health, education and housing projects. You will need to show a keen interest and above average skills in all aspects of architectural work, together with the ability to take full responsibility for your work. In return we can offer valuable experience in this expanding practice and a competitive salary.

Please send your CV to:
Nicky Southin at TSE-PP, 59 Compton Road, London N1 9YT or telephone us on 01-359 0221 for an informal discussion.

CLIVEDEN ARCHITECTS**ARCHITECTURAL VACANCIES**
We have a large number of clients actively seeking experienced
TECHNICIANS, ARCHITECTS AND ASSISTANTS

throughout the UK. If you are seeking Permanent or Contract work in the Architectural field.

Call us NOW for further details
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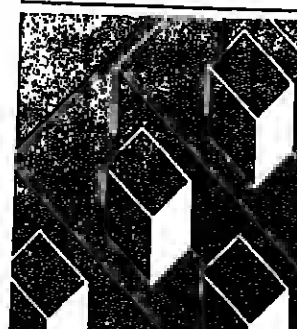
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Please telephone Ken Morgan or Alan Hood on 0203 655471

Ken Morgan Architects, The Apple House,
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Driving licence essential.

Further information and job description form, or CV to:
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Thornley Station Industrial Estate
Rainton, Durham, Co. Durham, Durham
Co Durham, Durham
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Cazenove Architects Cooperative
8 Bradbury Street, London N16 5LN

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Daventry, the administrative centre of the District continues to expand under the Town Development Act 1982. The Architect's Section's main area of work includes a multi-million pound Capital Works Programme encompassing Vary Sheltered Accommodation, Single Persons' Flats, bungalows for the elderly and improvement scheme to the current housing stock. In addition there are also industrial, leisure and public building projects. New Council Offices are currently being built, the work being co-ordinated by the Architect's Section.

For an informal discussion about this post, please contact Mr Ian Vincent the Principal Architect on extension 313

Benefits include 100% removal expenses, assistant with relocation and lodging allowances Housing accommodation may be available in certain cases.

Application forms and job descriptions are available from the Personnel and Management Services Office by telephoning Daventry 71100 extension 222 and should be returned by 17th October 1988.

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Professional & Technical Officers
£8,785 to £11,234 (Including Inner
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The teams undertake the design and construction of new courts, Police Stations, Offices, residential buildings, laboratories, computer installations etc. In addition there are vacancies in teams dealing with alteration and extension work offering valuable site experience.

Successful candidates will be expected to make a positive contribution to the work of the team and initiative is encouraged.

The Office is recognised for training purposes and encourages staff in all aspects of professional training including job release.

For Technical Grade 1 you need a City & Guilds Advanced Craft qualification or the equivalent or higher in the appropriate subject plus practical experience.

Application forms and further details are available from the Establishment Officer, Metropolitan Police Office, Room 213 (PSD/AA), 106 Regency Street, London SW1P 4AN or telephone 01-230 3122 (24 hour answering service).

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Scale SO1/PO1

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THE VACANCY

is within the Architectural Section of the land and Building Department which is undertaking a demanding design programme covering a wide range of projects. The Department is committed to the use of new technology including computer aided design.

THE SUCCESSFUL CANDIDATE

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QUALIFICATIONS

Registered Architect with 3 years post-qualification experience.

SALARY

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APPLICATION FORMS

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County Council Offices
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Applicants should reply, in writing, giving full details of qualifications and experience and the names of two referees to:

Hugh Lane-Davies, Dip. Arch., RIBA
Scott, Brownrigg and Turner, Architects
Bradstone Brook, Shalford, Guildford,
Surrey GU4 8HT

Interviews will be held in London.

UTTLESFORD DISTRICT COUNCIL
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£4/85 (£7,311 - £8,218)

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